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ABSTRACT

This manual provides secondary school teachers with ideas for relating economics to student needs, interests, and experiences. The tentative syllabus "Economics and Economic Decision Making," designed for 12th grade social studies by the New York State Education Department in 1987, is used as a guide. Motivational activities for the 18 topics in that syllabus are suggested, basically in the order in which they appear in the syllabus. The activities range from simple assignments to complex projects requiring considerable research, thought, and analysis. Unit 1 introduces students to economics, discussing economic systems and supply, demand, and prices. Unit 2 addresses microeconomics and covers the following topics: consumers, business, labor, agriculture, and public goods and services. Unit 3 focuses on macroeconomics and includes the following topics: measuring the economy; money; unemployment, inflation, and distribution of income; government decisions that affect unemployment and inflation; the criteria of a "good" tax; and economic growth as a national policy goal. Unit 4 reviews reasons for international trade, characteristics of alternative economic systems, economic problems of developing nations, and the economics of population growth, resource scarcity or imbalance, and economic growth. The appendix lists rock songs that deal with economic topics which might be used to initiate discussions. (GEA)

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Social Studies
Economics

MOTIVATIONAL ACTIVITIES

for

HIGH SCHOOL ECONOMICS

George Dawson

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MOTIVATIONAL ACTIVITIES FOR HIGH SCHOOL ECONOMICS

Keyed to the New York State Syllabus

"Economics and Economic Decision Making"

by

George Dawson

1988

Center for Business & Economic Education
Empire State College
Old Westbury, New York

with the assistance of

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INTRODUCTION

The purpose of this manual is to provide secondary school teachers with ideas for relating economics to student needs, interests, and experiences. Many teachers report that their students are not only ignorant of economic facts, concepts, and problems, but that they fail to see their relevance to their own lives. This is particularly true of those who do not plan to go to college. Therefore, many teachers have asked for material that might help them to show students how the content of the economics course deals with principles or issues that do have an impact on the lives of the pupils.

In this manual we attempt to provide ideas for activities that will relate the economic topics in the secondary school course to student needs, interests, and experiences. The tentative syllabus Economics and Economic Decision Making, designed for 12th grade Social Studies by the New York State Education Department in 1987, is used as a guide. Motivational activities for the 18 topics in that syllabus are suggested, basically in the order in which they appear in the syllabus.

It is not expected that teachers will be able to use all of the ideas presented in this manual. The activities range from simple assignments to complex projects requiring considerable research, thought, and analysis. The teacher should select only those that are suitable for his or her students, and that can be used effectively with the resources available.

There are many ways of teaching a given topic or concept, and the ideas included here represent only a few of the possibilities. Most have been used in classrooms, however, and have proven to be workable in at least some situations. Additional ideas can be obtained from the manuals that make up the Master Curriculum Guide in Economics published by the Joint Council on Economic Education (432 Park Avenue South, New York, N.Y. 10016). Joint Council publications that would be particularly useful include A Framework for Teaching the Basic Concepts by Phillip Saunders, et. al.; High School Economics Courses by John Morton, et. al.; Curriculum Materials for Teachers: Lesson Profiles (Secondary Level) by June Gilliard; and some more specialized works such as World Studies by James O'Neill; Teaching Strategies for World Trade by Wentworth and Leonard; and The Economics of Energy: A Teaching Kit (Grades 7-12). A subscription to the Joint Council's twice-yearly publication The Senior Economist should be a worth-while investment ($10 per year). For manuals on relating economics to history see Teaching Economics in American History: A Teacher's Manual for Secondary Schools by Dawson and Prehn, and United States History by James O'Neill. Write or call (212 685-5499) the Joint Council for a complete list of their materials. Many materials for teaching secondary school economics are commercially available as well. See the catalog Economics & Consumer Education of Social Studies School Service, Box 802, Culver City, CA 90232-0802. Edward Prehn's Teaching High School Economics is a useful book available from the New York City Council on Economic Education (Room 1625, 150 Nassau St., New York, N.Y. 10038) for $8.50.

The author would welcome comments on this manual. Any suggestions or criticisms can be sent to George Dawson, 2292 Arby Ct., Bellmore, NY 11710.

UNIT 1: INTRODUCTION TO ECONOMICS AND ECONOMIC SYSTEMS

I. Why Study Economics?

Initiate the course by dealing with the concept of scarcity -- the fact that human wants tend to be greater than the resources needed to meet those wants. Have the students make a list of the things they would like to have right now. Then have them write down the resources currently available to them, such as their savings, money they earn, or possessions that they might sell or trade to get these wants. Ask each student to check the wants that they could actually have, given these limited resources. The problem of scarcity should become evident, as it relates to the individual. Hold a class discussion of the results, making it clear that economics is the discipline that tries to deal with this problem.

After showing that scarcity is a personal problem, extend the idea to the school, the community, the nation, and the world. Discuss the needs and wants of the school, such as a new gymnasium, a swimming pool, a better cafeteria, and up-to-date computers. What resources are available to the school, and why can't all of the wants be satisfied? Then move to discussions of scarcity at the community, national, and world levels.

Introduce the concept of opportunity cost (or "real cost") by asking the students to review the lists of wants that they made earlier. Since they probably can't have everything they want, which items would they choose? Ask for explanations of their choices. Stress the point that in opting for a VCR over a CD player, for example, that the real cost is the loss of the opportunity (hence "opportunity cost") of the next best alternative.

[Note: Some teachers define economics as "the science of making choices." Make it clear to the students that economists do not have firm answers to the scarcity problem. Economists cannot predict future events precisely. Economics is the study of how we allocate our scarce resources -- labor, natural resources, and capital -- in trying to satisfy human wants. Economists can identify possible courses of action and estimate the costs and probable benefits of each course. Which course we adopt, however, may depend upon our goals, values, and political realities rather than on the approach an economist considers to be most efficient and least costly.]

Closely related to opportunity cost is the concept of trade-offs. Again return to the students' lists of wants, and ask them to identify things they would be willing to "trade-off" to get more of other things. For example, a student might be willing to spend less on clothes in order to buy more video tapes. Clothing is being "traded off" for video tapes. Note that the trade-off can include things not on their lists, such as their leisure time. A student might be willing to give up several hours of leisure time each week in order to take a job to earn money to buy the VCR.

Teach the students to use the decision-making grid in dealing with problems that involve trade-offs. This can be used for many types of choice-making

situations -- deciding how to spend an allowance, making career choices, analyzing problems confronting local or national governments, etc. Examples can be found in many of the publications of the Joint Council on Economic Education, such as Teaching Strategies: Consumer Economics by Robert Ristau, et. al. (1985), pp. 4-8. The form below can be duplicated so that each student can have one or more copies.

ALTERNATIVES	CRITERIA					

Symbols: ++ Very positive effect on the criterion.
+ Positive effect on the criterion.
- Negative effect on the criterion.
-- Very negative effect on the criterion.
0 No effect.
? Effect is uncertain.

STATEMENT OF THE PROBLEM OR SITUATION: _____

_____

PERSON OR PERSONS INVOLVED: _____

_____

To illustrate the use of the grid, let us take a problem that many teenagers face -- what to do upon leaving school. Let's assume that Mary is about to graduate, and that she has three choices or alternatives. She has been offered a full-time job as sales clerk in a store where she has been working part-time. But she would also like to attend a trade school and become a computer repair person. Attending college is another possibility. These three possible choices are listed under "alternatives."

At the top of the other columns Mary indicates the factors (criteria) she will consider in making her decision. (Additional columns might be needed.) The things that are important to her are: (1) effect on current income, (2) effect on future income, (3) effect on family's savings, (4) effect on her leisure time, and (5) having a job with prestige.

	CRITERIA				
ALTERNATIVES	Current income	Future income	Family savings	Leisure time	Prestige
Job as sales clerk	+	-	0	+	-
Trade school	-	+	-	-	+
College	--	++	--	--	++

The sales job will increase her current income, so Mary puts a plus (+) under "Current income." The Trade school tuition would reduce her current income, however, so she places a minus (-) sign here. College would be even more costly, so two minus signs (--) go in that box. She sees the sales job as a dead-end position that would not increase her future income, so she places a minus sign in the 2nd column. The trade school would prepare for a well-paying job, so she puts a plus in that box; while college gets two pluses because college graduates tend to earn the most. The sales job would not affect her family's savings, so a zero (0) goes there. The family would have to help pay for the trade school, so a minus is recorded. College tuition would take a large bite out of family savings, so she puts two minus signs here. The sales job allows her plenty of leisure time, so a plus goes in the 4th column. She would sacrifice leisure time by going to a trade school or college, so they receive minus signs. Prestige is important to Mary, so the low-prestige sales job gets a minus sign, while the skilled trade and the college education receive plus signs. Now Mary can systematically examine the trade-offs involved in the three choices. The grid may not solve the problem, but it should help to clarify the possible costs and benefits of the various alternatives.

[Note: Students may differ on how to evaluate each alternative and on what criteria to use. Thus, the grid can be individualized. When you use it to analyze public policy issues there can be good discussions of the appropriate criteria and how to evaluate the alternatives.]

Select a current community issue that involves trade-offs, and that affects young people in some manner. For example, there may be a piece of land that some people want to develop as a playground, while others want it to be used as a parking lot, and another group hopes to build houses on it. Have the students examine the issue and how they are affected by it. The decision-making grid might be used to identify the trade-offs involved and help the class reach a decision they could support.

Using the issue studied in the previous example, or perhaps another issue that the students are interested in, arrange for "hearings" on the question. The students can be organized into groups representing the various points of view. If possible, arrange to have interested (and interesting!) people from the community visit the class and speak about the problem. Be sure that the various trade-offs are identified and that an attempt is made to estimate the costs and benefits of each proposed solution.

As an assignment, ask the students to identify trade-off situations in which they have been involved in some way -- deciding whether to take a summer job or to have fun, choosing how to spend a gift certificate, and the like. They should describe and explain the situation, identify the opportunity costs and trade-offs, and show how the problem was resolved. They might be asked to evaluate their decisions. Were they the right choices? Why? Why not?

Have the students make lists of their own economic goals, both short and long term. (Short term might be to get a part-time job to earn money for a portable radio. Long term might be to achieve a managerial position in a large corporation.) They should try to identify the real costs involved in reaching each goal. What trade-offs will have to be made? Do any of the goals conflict? (Example: A short term goal of buying a new car might conflict with a long term goal of paying for a college education.)

After completion of the exercise on personal goals, have a discussion of the apparent economic goals of your community, county, state, or nation. As each goal is identified, ask the students to consider how these goals might affect their personal goals. (For example, one town wants to reduce traffic congestion, preserve its water supply, and maintain its suburban environment by halting industrial development; but this could mean fewer job opportunities for young people.)

Economic models are tools of analysis that can help us understand many situations and problems. To convey the idea that such models are not pictures of reality but simplified representations, bring some road maps or maps of the area to class. Have students explain each symbol or line. Discuss what the maps show, and what they do not show. (A road map may show how to get from Town A to Town B, but it does not indicate the current conditions of the roads, tell what the traffic will be like, etc.) Then use some simple graphs or charts from recent newspapers and news magazines. (U.S. News & World Report usually contains several good, clear graphs of economic events.) Do not assume that the students understand charts and graphs, so explain vertical and horizontal axes, coordinate points, etc. (A good simple reference work is Peter Selby's Interpreting Graphs and Tables, published by John Wiley & Sons as a "Self-Teaching Guide.") Select some simple line or bar graphs to illustrate. For example, a line graph showing that average stock prices are rising does provide useful information, but it does not show what is happening to one particular stock.

Follow the above activity with assignments in which the students must prepare graphs of something in which they are interested. Some might draw graphs showing the batting average of their favorite baseball star.

Others might use graphs to record their average grades, their weekly earnings (for those who are working), how much gasoline they use in their cars each week, and so on. Pie charts can be made to show how they spend their money -- one segment showing the percentage spent on clothing, another showing expenditures for movies and concerts, a third indicating the percentage devoted to food and candy, a fourth depicting the portion saved, etc. In short, the students should be familiar with the types of graphs and charts used in economics before they tackle supply and demand curves.

Ask students to clip articles, graphs, charts, and statistical tables from newspapers and magazines if they deal with economic topics. They should be prepared to display their charts or graphs and explain what they show and how they help to illustrate or clarify a situation. What does the graph show that simple prose cannot describe as effectively? (For example, a pie chart showing the state's budget enables us to get a good indication of the relative importance of education, whereas a list of actual expenditures can be difficult to grasp because of the huge numbers involved.)

II. Economic Systems

To start a discussion of economic systems, bring some shiny red apples, candy bars, or other items to class. Be sure to bring things that the students will want, and bring only enough for about half the class. Ask for suggestions on how to solve this scarcity problem. Some may say that the teacher should decide how to distribute the items. This would be the case in a command economy, in which decisions on what to produce, how to produce them, and how to distribute them are made by a central authority. Use some unfair or irrational means, such as giving the items to those with black hair. This will surely engender a heated protest. Then try the approach associated with a traditional economy, wherein common habits, customs, and traditions are relied upon to decide what, how, and for whom to produce. Say that the boys will get the items, because it is traditional in our economy for men to do the heavy work, and thus they have great need for calories. There will be a howl of protest from the girls. Finally, use the market economy approach and let the students bid on the items. Those who are able and willing to pay will get them. List the three system titles on the chalk board and discuss the basic features of each.

Most economies are mixed -- they contain elements of all three systems. The United States is said to have a market economy because most of the decisions on what, how, and for whom to produce are made by private individuals operating in a market basically free from government control. We do have some aspects of the command and traditional economies, however. Write the terms command economy and traditional economy on the board and ask students to try to identify examples in our own society that would illustrate command or tradition. Ask for examples of situations that affect the students. Under "Command Economy" you might put:

"Children are required to go to school."
"Laws preventing children from working in certain occupations."
"You must pay sales or excise taxes on many things you buy."
"If you are employed you must pay income taxes."
"You can't drive legally until you reach a certain age."

Under "Traditional Economy" you can list:

> "Some jobs are traditionally 'female' even though they could be performed by men; and some 'masculine' jobs could just as well be done by women."
> "Schools, businesses, and government offices close down on certain holidays."
> "Consumer spending rises in November and December because of the tradition of Christmas giving."
> "Schools close in the summer, even though few children are needed to work on the farms as they were in our early history when this practice began."

Have a class discussion of these and other factors, and of what might happen if we had a purely market economy.

Show the film "Return to Mocha". Using a cartoon format, this half-hour film illustrates the traditional, command and market economies through rock music and a fictional account of three island nations that learn to trade profitably with one another in spite of their different economic systems. (To borrow the film write Video Outreach, c/o JN Co., Box 1199, Melville, N.Y. 11747. It is available in ½-inch VHS and 3/4-inch. You might also be able to obtain it from the Center for Economic Education in your region.)

Present the students with economic problems that affect them and ask them to show how each system would be likely to deal with those problems. For example: "The unemployment rate is very high among teenagers who want jobs. How might each economic system provide jobs for teenagers?"

To illustrate the workings of the market economy show the film "Chickenomics." This amusing 24-minute film deals with private ownership of resources, consumer sovereignty, markets, and competition. It can be obtained in the form of ½-inch or 3/4-inch tape from the Federal Reserve Bank of Richmond, Public Services Dept., P.O. Box 27622, Richmond, VA 23261. (Telephone: 804 - 643-1250.)

For an assignment, have the students write brief descriptions of their career plans, telling how they will prepare to enter their chosen occupations. Then ask them to consider how their plans, preparations, and activities might differ if they lived in a country with a different economic system. For example, would they be able to open their own business firms in a command economy? What kinds of jobs could they get in a command or traditional economy, and what kinds of wages and working conditions could they expect?

The factors of production that are used in nearly all enterprises are land (which includes all natural resources), labor, and capital. Some economists include entrepreneurship as a fourth factor. Labor includes all productive human effort used in an enterprise. Thus, managers and professionals who work for a salary (wage) are considered by economists to be labor. Capital is human-made wealth used to produce goods and services, although the money used to buy capital goods is sometimes called "capital" as well. Economists like to think of capital as being tools, machines, equipment, factories, computers, trucks, typewriters, etc. (that is, real capital as opposed to money capital). The entrepreneur is the person who assumes the risks in starting a business and in organizing and controlling the other factors of production. After your

students have learned the definitions of the factors of production, ask them to describe an enterprise in which they are interested and to show how the factors are used in that enterprise. They might use firms they have worked for, or that they patronize often. Example: A popular hamburger restaurant often uses teenagers for labor. Natural resources were used to provide some of the items that are served. Capital would consist of the building, the ovens, the furniture, cooking tools, etc. The person who started and owns the business is the entrepreneur.

Some students may be thinking of establishing their own businesses. Some might have done so already. Even such a small operation as a lawn-care or baby-sitting business can be considered. Ask these students to identify the factors of production used in such a business, and to explain how and why they are important to the business. Those who are seriously thinking of setting up businesses should be encouraged to estimate what each factor will cost, how much of that factor will be needed, where and how the factor can be obtained, and so on. Students should learn that there is a factor market, which provides enterprises with workers, capital (both real capital and money capital), and natural resources. Principles relating to supply, demand, and price will apply to this market in much the same way that they apply in the market for consumer goods and services.

For a somewhat challenging assignment, have the students write reports on how the factors of production are used in various economic systems. Perhaps you can have them work in groups. One group might examine the Soviet economy and other basically command economies. Others could concentrate on market economies and traditional systems. The result might be a large chart that shows how the different systems are similar and how they vary in their use of the factors of production.

Ask each student to identify a country that he or she would like to visit and to make a study of that nation's economic system. In what ways is it similar to the United States economy? How is it different? How does it use the four factors of production? What are its major resources? What economic problems does it face? How can the student use this information in planning a trip to that country? (In a command economy, for example, the student would need to be aware of activities that are forbidden, such as buying something in an illegal market. In a traditional economy, a visitor must try to avoid activities that are contrary to the customs and traditions of the country.)

To convey the idea of interdependence, have the students write down all the ways in which they are economically dependent on others, and how their families and communities depend upon others. Give them an opportunity for creative writing by asking them to describe what their lives would be like if they tried to be totally independent. What would their levels of living be like? What would they do for food, clothing, shelter, transportation, medical care, etc.? Ask that they note how we as a nation depend upon some other nations to meet our needs and wants.

Specialization is related to interdependence. It enables us to become more efficient, increase productivity, and enjoy a higher level of living; but it also makes us more dependent upon others. Have the students study a product that they use often and list all the specialists who had a hand in producing that product. Students might also write a short paper on their own career plans, explaining how they will becomes specialists and how their future work will relate to the specializations of other people.

To show how specialization and division of labor can increase productivity conduct a simple (and enjoyable) classroom experiment. Tell the class that they are going to manufacture a simple product -- note pads. They will need plain (or lined) 8½x11" paper, paper clips, and pens or pencils. Demonstrate the following steps:

1. Fold the paper in half and cut or tear it to make two smaller sheets of equal size.
2. Fold the smaller sheets in half and cut or tear them so that you now have four small sheets of equal size.
3. Assemble the four sheets and attach them with a paper clip in one corner.
4. Print "Notes" at the top of one of the outer sheets.

Allow the students to make one "note pad" to be sure they understand the steps. Now divide the class into two groups. The students in one group (the "control group") will work individually. Students in the other group (the "experimental group") will form production teams and specialize. One will do nothing but fold the sheets of paper. Another will do the cutting or tearing. A third will assemble the sheets and attach the paper clip. A fourth will write "Notes" on the finished product. Let the teams make one note pad to be sure they are properly organized. Now set a time limit of four or five minutes for the experiment. When everyone is ready, give the signal to start work. At the end of the production period, count the number of completed note pads in each of the two groups. Usually, the experimental group will have produced more pads, and they will often be of more uniform quality. Of course, some teams might produce more than others, but those who specialized and divided the work usually outperform those who worked individually. (Keep the pads and use them -- don't waste paper!)

Have a class discussion on how specialization can be used in a variety of situations that are of interest to students. For example, note how a baseball team is made up of pitchers, catchers, outfielders, etc. How can this principle be applied to things that the students do? If some students are making cookies and cakes to raise money, how can they improve production by specializing and dividing the work?

All of the factors of production -- land (natural resources), labor (all productive human effort), capital (human-made goods that are used to produce other goods and services), and enterprise -- contribute to the output of America's wealth. Thus, all are entitled to a share of the revenues (income) of the enterprise. The payments to these factors are categorized as:

1. Rent is the payment for land.
2. Wages (and salaries) are paid for labor.
3. Interest is the return to capital.
4. Profits (what is left after the other payments are made) go to the risk-taking owners and entrepreneurs.

After listing and defining these terms, ask students who have money incomes to categorize those incomes and explain them. Many students have worked for wages, and some have bank accounts that earn interest. A few may have operated some sort of enterprise and received profits. Others may even own shares of stock and receive dividends (shares of corporate profits). Have a discussion on how our market economy rewards people who contribute their labor, land, savings, or entrepreneurial abilities to the production of goods

and services. (A more technical treatment of this subject can be included in Unit Three, Part III. At this early point in the course it is enough to convey the idea that there is a relationship between the value of our productivity and our incomes, and that one way to earn a higher income is to become more productive.)

Ask students who have run their own enterprises to describe their operations to the class, to identify the various costs of production, and to try to determine how much of their revenues can be classified as profit. For example, if a student had a summer lawn-care business, he or she might list payments made for equipment as capital investment. If the student hired a helper, the helper received wages. After listing all of the explicit costs, deduct the total cost from the total revenue. Students will probably say that this is profit -- but they will probably be wrong. If the student did some of the work himself/herself, then a portion of that "profit" should be considered wages paid to himself or herself (implicit wage). Move then to a discussion of the role of profit in the market economy. You might also discuss the ways in which the factors of production are rewarded in other economic systems (traditional and command economies), and contrast them with the market economy.

III. Supply, Demand and Prices

To introduce the topic of competition, ask students to reveal the wages or other payments they have received for selling their services or for selling goods. List some of these occupations or goods on the chalk-board, with the amount of the wage or price. Then ask: "Why weren't these payments higher?" "Why didn't you receive $10 or $20 instead of only $5 for doing that job?" "Why didn't you charge much more for the cookies you baked?" Typical responses should be: "I can't charge more for baby-sitting because there are plenty of other people who will do it for less." "I can't charge more for my cookies because people can buy them in bakeries and super-markets." In short, competition has kept prices and wages down. Make the point that we are all affected by competition, both as sellers of goods and services and as consumers.

Make a study of an industry that the students are interested in, and of the way in which competition affects prices in that industry. For example, note the recent trends in the prices charged for renting video tapes. As more and more video rental shops have appeared, the rental and "membership" fees have plunged. For individualized assignments have the students study the competitive situation in the industries in which they hope to work. They should also consider competition for the jobs they want to have. How might this affect their incomes? How can they prepare themselves to meet this competition?

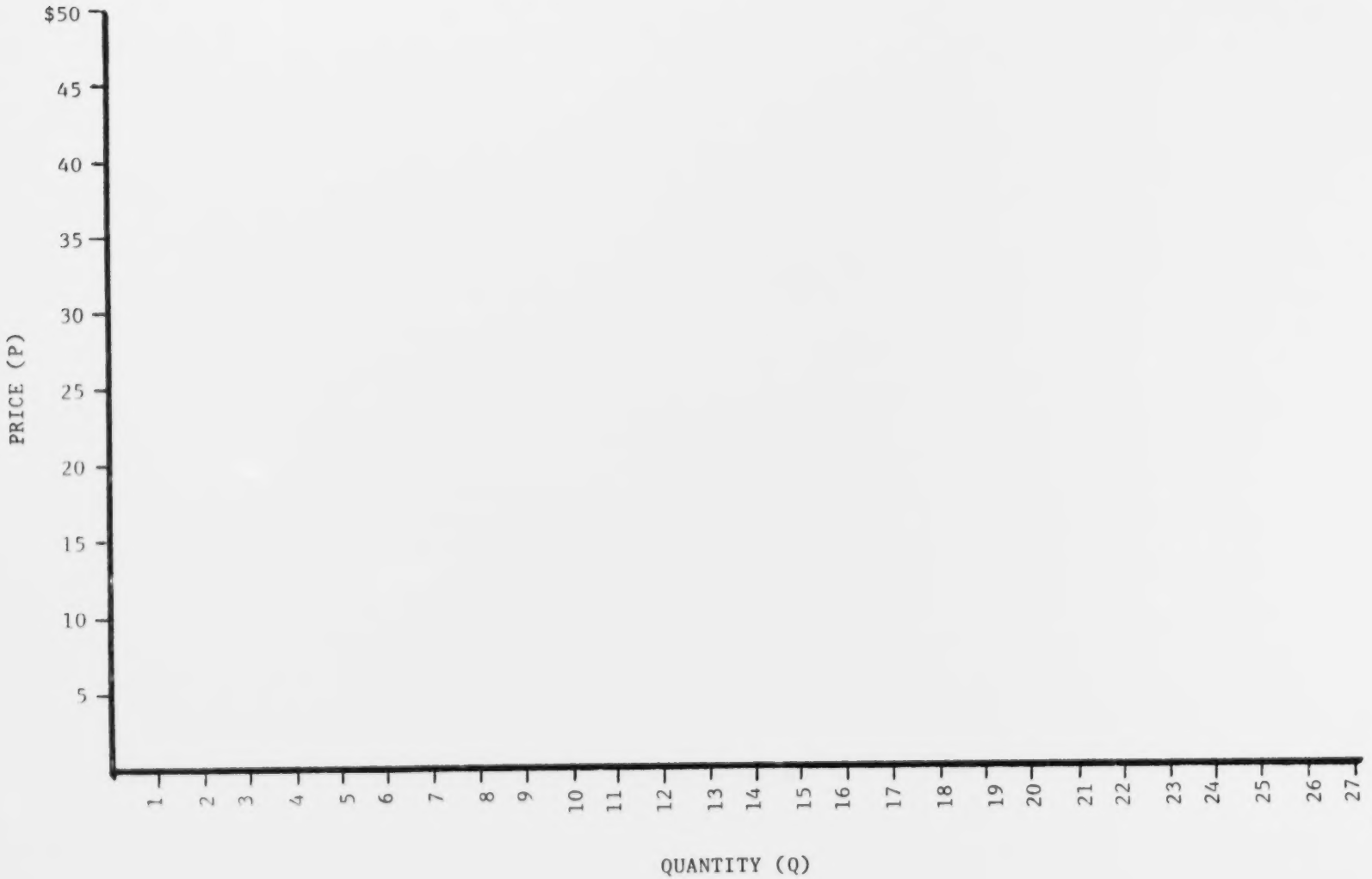
To demonstrate the law of demand conduct a "sale" in the classroom. Give each student a 3x5" index card or small slip of paper. Display an item that the students would be interested in buying, such as a small portable radio with ear phones. Pretend that you want to sell the radio, and ask the students to write down the highest price that they would be willing to pay. To avoid complicated computations, insist that they use increments of five dollars -- $5, $10, $15, $20, etc. They are not to let anyone else see their "bids", and they need not put their names on the cards or slips. Collect the cards or slips and arrange them in order from highest to lowest price offered.

Put a demand schedule on the chalk-board, and have the students copy it in their note books or on a sheet of paper. The conventional demand schedule has two columns: Price (P) and Quantity (Q). The price column lists the various possible prices from highest down to the lowest. The quantity column shows the number of items that would be purchased at each of those prices. It is suggested, however, that you add two additional columns to help students see what is happening and why such a schedule is important to the seller. Add a "Bids" column to show the number of students who specified each price, and a "Total Revenue (TR)" column to show how much you would make if you sold radios at each listed price. (TR = P x Q.) The following example is based upon an experiment with actual students, slightly modified.

Price (P)	Bids	Quantity (Q)	Total Revenue (TR)
$50	1	1	$50
45	1	2	90
40	2	4	160
35	3	7	245
30	5	12	360
25	6	18	450
20	5	23	460
15	2	25	375
10	1	26	260
5	1	27	135

Explain how Quantity was derived. For example, at the price of $35, three appears in the "Bids" column because three students offered to pay $35. The quantity you would sell at $35 is 7, however, because those students who were willing to pay $50, $45, or $40 would certainly buy a radio at $35. Thus, Quantity is the number of students who bid $35 plus those who offered a higher price. Have students examine the Total Revenue column, and note that the highest price is not always the best price for the seller. Indeed, in this case, you would maximize your revenue by charging only $20 per radio. (We are assuming that you can charge only one price to all customers.) Now have the students draw a demand curve, using the above information. You might want to prepare a graph like the one on page 12 so that students will make fewer errors. Be sure that the horizontal axis (quantity) will accommodate all the students in the class (27, in this case). Get them started by showing them how to locate one or two of the points. See page 13 for the demand curve based upon the above figures. Do not be disturbed if your curve is jagged or irregular, or does not look like the demand curves in a textbook. As long as it generally slopes down and to the right, it shows the law of demand -- as prices drop, the quantity sold increases, and vice versa.

Students may ask why it is necessary to draw curves, in view of the fact that the above demand table gives the essential facts. Explain that the curve enables us to make further analyses of the data, and that it is often easier to interpret than a complex statistical table. For example, the curve on page 13 enables us to interpolate -- to get a good idea of how many radios you would sell at some price that does not appear in the demand schedule. For instance, suppose you decide to charge $27.50. Move up the vertical axis to a point half way between $25 and $30. Then move to the right until you touch the demand curve. Then move down to the horizontal axis, and you will see that you could expect to sell 15 radios at that price.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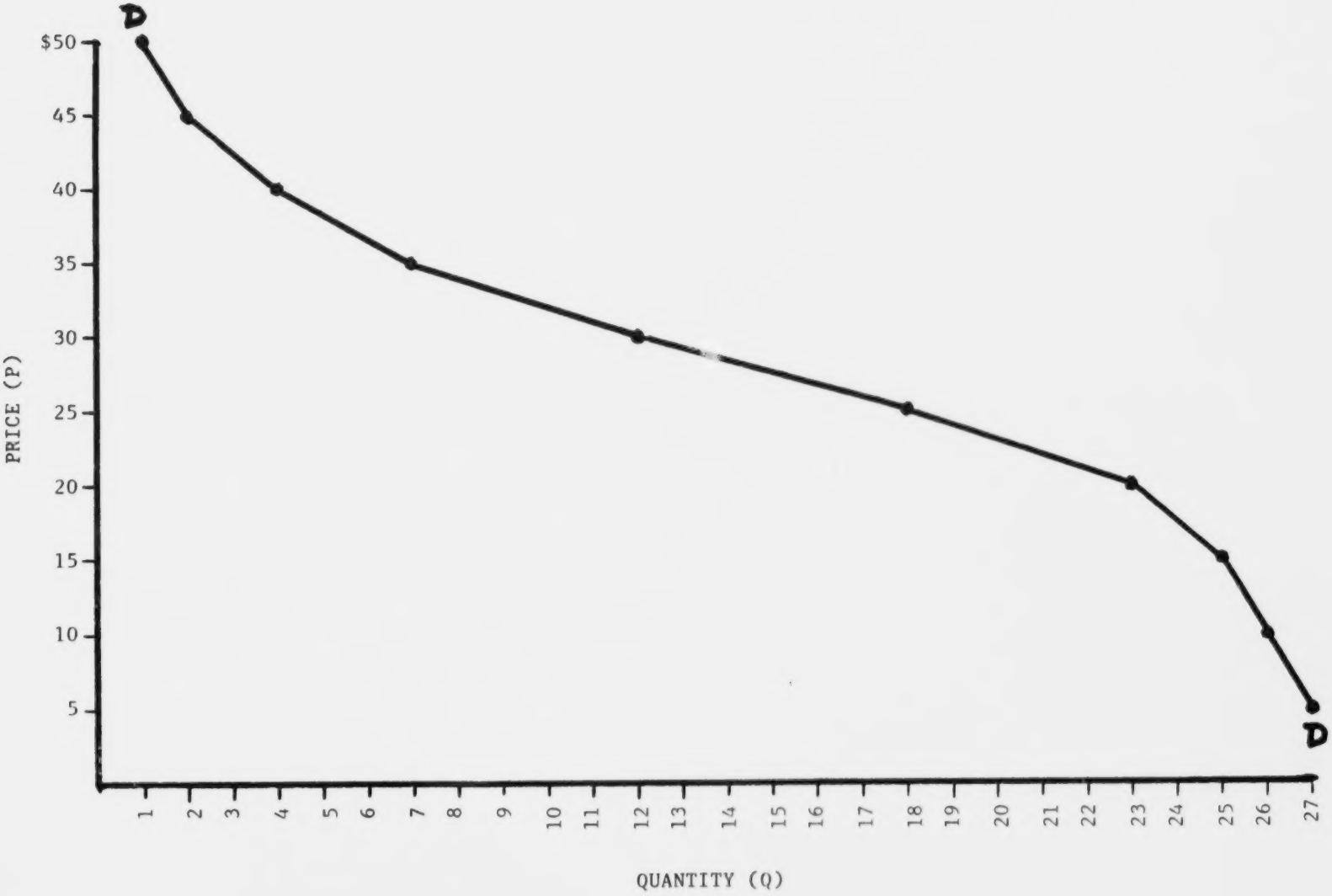
QUANTITY (Q)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QUANTITY (Q)
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19

Armed with the information obtained from your "market survey", you are now in a position to make a more intelligent decision in regard to pricing your product. Be sure that students understand that demand schedules can apply to any product or service that they might sell, including their own labor. Hold a class discussion on ways in which the law of demand might be used by students. For example, if a class decides to sell a product or service to earn money for a trip, how can a knowledge of the law of demand guide them in their decisions on what to sell, how much to produce, and how much to charge?

Next, introduce the concept of elasticity of demand. A seller should have an idea of whether the product has an elastic or inelastic demand. In one school, for example, a class was making and selling cookies to raise money. The cookies sold well, so they raised the price. As a result sales plunged and the revenues (income) declined. The demand for their product was relatively elastic -- the percentage drop in sales was greater than the percentage increase in price. The same applies to services. Steve had been mowing lawns in his neighborhood for several weeks. He decided to raise his fee by 25%, but lost 50% of his customers! Demand tends to be elastic when the product or service is not a necessity or when there are alternatives for the consumer. Demand tends to be inelastic when a product or service is a necessity and there are no available substitutes. As a homework assignment, ask the students to list products and services they (or their families) use that appear to have an elastic demand, those that appear to be inelastic, and (just to make life difficult) some items that are sometimes elastic and sometimes inelastic. [One's demand for home heating fuel might be inelastic in the winter and elastic during the summer, for example.]

The revenue test is a simple way of determining whether or not the demand is elastic. Refer back to the demand schedule on page 11. Every time the price drops (between $50 and $20), total revenue increases -- demand is elastic. This is to be expected with an item that is not a necessity. Note, however, that price decreases below $20 do not increase total revenue. Over the $20 to $5 range, then, demand is inelastic -- a drop in price will not greatly increase your sales. In this case you are dealing in a very small market (only 27 people) and you are simply running out of potential customers. In a more realistic situation, with a market of thousands, the result would probably be different. In any event, students should be aware of elasticity of demand whether they plan to sell their services or to sell goods in the future.

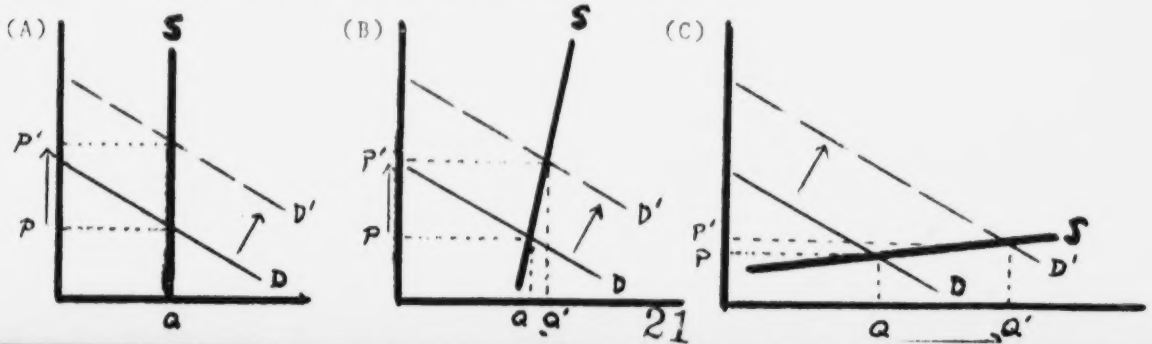
Students should know that changes in demand can occur. A change in demand is not a movement up or down an existing demand curve -- it is a shift in the entire demand schedule or curve. A change in demand means that at any given price people will buy more (or less) of the product. To teach about this, ask students what factors might cause them to buy more radios (or whatever product you use in your experiment). An increase in incomes might result in more radios being sold at any given price, or in willingness to pay more for a radio. If these radios become the "in" things to have, they might be willing to pay more. (See any standard economics text for other factors that affect demand.) If demand increases or decreases, a new demand schedule goes into effect, and the demand curve shifts. It will move to the right if demand increases, and to the left if it decreases. You might try to

illustrate this by having the students once again write down their "bids" for your radio. Tell them to pretend that they all have much more money to spend, that anyone without such a radio is considered to be a "nerd," that radios would make good gifts for others, etc. If their responses indeed show that demand has increased, have them draw a new curve next to the one on page 13. Which way did it shift? Why? What might cause the curve to move in the opposite direction?

Once the principles of demand are clear, consider <u>supply</u>. Your "market survey" and demand curve gave you valuable information, but you still do not know what the <u>market price</u> of radios will be if others are also selling them. Try to obtain a <u>supply schedule</u> by having students write on a slip of paper the price they would agree to accept if they were selling your radio. (You might expedite things by asking for a show of hands to indicate how many would accept $5, $10, $15, etc. You could also simply make up a supply schedule and tell the class that you have invented it, but that it reflects a realistic market supply schedule.) It should now be clear that more radios will be offered for sale at high prices than at low prices. Put a supply schedule on the chalk-board, with Price (P) in the left-hand column, and Quantity (Q) in the right-hand column. Use the same range of prices as you used in the demand schedule. Quantity now means the amount that would be offered for sale at each price, however.

Distribute copies of the blank graph on page 12 and have the students draw a <u>supply curve</u>, using the data from the supply schedule. Or, simply have them draw the supply curve on the same graph with the demand curve. The curve must slope up and to the right. Discuss the meaning of the curve, and point out that there are supply schedules for services, such as baby-sitting and other typical teen-age occupations. As students think about the services they will offer for "sale" in the labor market or the goods that they will try to sell, they should be aware of the existence of the supply schedule and how it might affect them.

<u>Elasticity</u> also applies to supply. In some cases, supply can be perfectly inelastic. That is, the supply of something is fixed and a price increase will not bring more of that thing into the market. Land, in general, has an inelastic supply curve (the "curve" is a straight vertical line, as in the following graph). The number of seats in a concert hall is usually fixed, as is the number of parking spaces in a parking lot. Students should be familiar with both of these inelastic supply situations if they have sought tickets to a performance by a popular rock group or tried to find a space in a busy parking lot. (In the long run, the concert hall might add more seats, and the owner of the parking lot might obtain more land and add spaces, thus making the supply somewhat less inelastic than it was.) Supply is <u>elastic</u> if the percentage increase offered for sale is greater than the percentage increase in price. It is <u>inelastic</u> if the percentage change in the quantity offered for sale is less than the percentage change in price.



Graph (A) on page 15 show a perfectly inelastic supply situation. How does this help to explain the high prices that ticket "scalpers" charge at very popular rock concerts? The supply of seats cannot be increased, so the high demand causes prices to rise. Graph (B) shows a relatively inelastic supply curve. Demand has increased, as shown by the shift from D to D'. The price rises, but not quite as much as the price in Graph (A). There is a slight increase in the quantity sold. (If the manager of the rock concert is able to bring in a few extra folding chairs, for example, the scalpers might not be able to charge quite as much.) Graph (C) shows a relatively elastic supply situation. Demand has increased by the same magnitude as in Graphs (A) and (B), but price rises by only a small amount, while quantity increases sharply. This is often the case in the long run period, when existing producers can add new equipment, build new plants, find new sources of raw material, etc. In the short run period, producers can increase their output by producing more intensively in their existing plants. Supply will thus be either relatively elastic or relatively inelastic, as in Graph (B), but it will not be perfectly inelastic. During the market period (also called the momentary period), sellers can draw upon their existing supplies -- they cannot increase them. During the great blackout of 1965, for example, the demand for candles in New York City soared; and the price rose from a few cents to several dollars. Graph (A) illustrates this situation.

Students should consider the elasticity of supply when they make their plans to sell goods or services. If they plan to sell a product o. a service that has an elastic supply, they cannot expect to increase their prices (or wages) without risking a loss of revenues (income). In one school, a boy was earning money by making and selling wallets. Other students began to produce the wallets, however, thus increasing the supply and bringing down the price. The boy's high profits were quickly eroded.

Supply and demand can be related to students' interests as consumers. Have them study supply, demand, and elasticity for goods or services they buy often. Also study "seasonal goods" such as Christmas cards, boxes of Valentine's Day candy, and other items associated with holidays. What happens to the prices of Christmas cards, wrapping paper, decorations, etc., on December 26? (There is still a supply on hand, but demand has dropped, so prices go down sharply.) How can they use these principles in planning their own activities and purchases? (Examples: In going to a popular resort, one can often save money by planning to be there during the week-days instead of on week-ends. Movie tickets are sometimes cheaper during the day than in the evening or on week-ends. Restaurants frequently charge less at lunch or during "off times" than they charge for the same dishes in the evening and on week-ends. Consumers can save money by purchasing swim wear late in the summer and saving it for next year.)

UNIT 2: ELEMENTS OF THE ECONOMY (MICROECONOMICS)

I. The Consumer in the Economy

Everyone is a consumer; thus it should be easy to relate this topic to the needs and interests of the students. To introduce consumer decision-making ask the students to list the goods and services they frequently purchase, and to write a brief explanation of why they buy these things. The explanation should include the concept of utility -- the benefit one gets from a good or service. This can be categorized as "practical" or "functional" utility, such as the benefit derived from a warm coat in the winter time; or it can be "psychological" utility, such as the satisfaction one gets from wearing a gold chain. The list might be divided into those things that are necessities and those that are luxuries. (A few items might fall into both categories, such as a fur coat that provides both warmth and prestige. In such a case, it might be interesting to have the student determine what percentage of the cost was accounted for by the desire for prestige. If the fur coat cost $1000, and an equally useful cloth coat could have been purchased for $100, then 10% of the fur coat's price was for practical utility and 90% for prestige.)

Ask students to indicate their current incomes (this information can be kept confidential by the teacher if the student does not want his or her income to be revealed) and to develop a budget or plan for that income. How much should be spent on consumer goods and services, and why? How much should be saved, and for what purpose? Where should be savings be put? Will taxes have to be paid on this income? If so, to whom and how much? (Students who do not have incomes can be asked to imagine that they get a specific amount periodically, and develop a budget for that amount.)

Show the film "You're Accountable" and use the accompanying workbook to teach about consumer finances. This 50-minute video-tape is available in ½-inch VHS format or 3/4-inch. It covers such topics as savings accounts, interest, checking accounts, and consumer credit. Copies may be available from your school library, BOCES, your Teacher Resource Center, your public library, or the nearest Center for Economic Education. If not, the video-tape and workbook can be borrowed from;

Media Services Distribution Center
Building 8, Research Park
Cornell University
Ithaca, N.Y. 14850. Tel.: (607) 255-2091

[Note: You need not show the entire film in one session. It is divided into three segments -- Saving, Spending, and Borrowing -- each with different stories and actors. Show one segment per lesson.]

Divide the class into small groups, each group representing a family. Present each "family" with an imaginary income and a description of their particular circumstances -- what type of housing they occupy, the age of each family member, their major possessions such as cars, what types of jobs family members hold, etc. Each "family" must develop a budget and show how they plan to spend and save. Have them check actual prices of goods and services to be sure their plans are realistic, and have the whole class discuss each budget and raise questions about its adequacy.

To keep the budget simulation going throughout several lesson, have each group select "chance cards" from time to time. On these cards you should write unexpected events that will affect the "family's" budget. Negative events can include such things as sudden illnesses, auto accidents, the need for plumbing repairs in the home, a parking ticket, and loss of money or property to a thief. The price of various items can be changed from time to time, such as higher premiums for health insurance or an increase in rent. A few positive events can be included, such as a Christmas bonus of $100 from one's employer or winning $1000 on a TV game show. The "family" must then decide how to modify the budget to account for these events. Also discuss ways of being prepared for unexpected events in the future. [Note: The decision-making grid on page 3 can be used in making consumer spending decisions.]

Discuss the subject of borrowing and ask the students to envision situations in which they might want to borrow money. Why would they want to borrow? (To pay for a trip, to buy a car, to go to college, etc.) List on the chalkboard a variety of reasons for borrowing. Explain that some of these might be "self-liquidating" and some might not. That is, if a student borrows money to buy a power mower and uses the mower to earn money, the earnings will enable him or her to pay off the loan -- it is "self-liquidating." If money is borrowed to pay for a pleasure trip the loan is not "self-liquidating". Have the students examine various sources of funds, such as banks and consumer finance agencies. They should compare them in terms of interest rates, how much time they can have to repay, and other conditions. They must also think about how they will go about raising the money to repay. [The film "You're Accountable" would be useful in this activity.]

Encourage each student to establish a personal savings plan. They should list the reasons for saving, and indicate which reasons are for long-term goals (such as financing a college education) or short-term (such as to buy a bicycle). Where should the money be placed? Students should learn about savings accounts, money market funds, certificates of deposit, mutual funds, U.S. savings bonds, etc. They should compare them in terms of interest they pay, safety, and how accessible the money will be when wanted. [Again, the film "You're Accountable" can be instructive at this point.]

To illustrate the role of the consumer in our economy, suggest that students visit stores and shopping centers for a systematic study of the types of goods offered for sale. [It might be wise to contact store managers in advance, obtaining their permission for the studies.] In a record store, for example, a student might note the space devoted to rock records and tapes as opposed to other types of music such as classical, country, and folk. The manager might be asked to explain why rock usually gets the most space. This should clearly show how consumer demand determines what will be produced and offered for sale.

In a study of consumer protection, ask students to describe experiences in which they have been given shoddy merchandise, overcharged, or misled by false or misleading advertising. Ask them to tell what they tried to do about the problem and how successful they were. Then discuss the various ways that consumers have of protecting themselves, and the agencies or organizations that exist to protect consumers. (See Consumer's Resource Handbook, published by the U.S. Office of Consumer Affairs, for a long list of consumer protection offices. Available free from the Consumer Information Center, Pueblo, Colorado 81009. Also ask for the Teacher's Guide that accompanies the Handbook.)

To teach about the factors that affect consumption, ask students to consider the products or services that they might be making and/or selling in the future, and to try to identify the factors that might affect people's decisions regarding the purchase of those items. How important is price? Are the items or services necessities or luxuries -- or both? Are they apt to go out of fashion quickly? Does style make a difference? (Probably "yes" for clothing, but no for basic food items.) What is the role of advertising in marketing this product or service?

II. Business in the Economy

To introduce the role of business in our economy, ask the students to list any businesses that they have been involved with or that the members of their families are involved with, either as owners, managers, or employees. They should then explain how these businesses try to meet the needs and wants of consumers. What contribution do they make to our economy? (Note that farmers, self-employed fishermen, doctors, lawyers, and other self-employed professionals are considered to be business people.) It should be understood that business not only produces goods and services to meet consumer demand, but also provides employment and income to workers.

Ask each student (or small groups of students) to study an actual business firm in your area. Encourage the study of firms that students have worked for or that family members are involved with. Is the firm a proprietorship, partnership, or corporation? Why is it organized in this manner? What goods or services does it produce? How does it use the factors of production (land, other natural resources, labor, and capital)? Perhaps interviews can be arranged with owners or managers of businesses. (Remind students to be tactful when asking questions about a firm's profits, competitive position, labor policies, and the like.)

The importance of capital and productivity should be stressed. Without real capital (tools, machines, equipment, trucks, factory buildings, etc.) the worker's productivity (output per hour of labor) would be very low. Have the students list the capital goods they will use in their future occupations and explain why these items are important in improving efficiency and output. Hold a class discussion on what life would be like without these capital goods. (What would medical care be like without x-ray machines, for example? What was it like to be an accountant before the electronic calculator?) To illustrate the way in which capital goods can increase productivity, return to the experiment suggested at the top of page 9. Again divide the class into two groups to produce note pads. One group must crease and tear the paper by hand, and then attach the small sheets with paper clips. The second will use scissors to cut the paper and will have staple machines to attach the sheets. The group with the better capital goods (scissors and staplers) will produce more and better note pads.

Students can learn about the securities market and how businesses raise money capital by the familiar practice of simulating purchases of stocks and/or other securities. Let each student pretend to have a certain amount of money to invest in securities. Students then "purchase" securities of their own choosing, after having done some research on the companies that issued them. Each student should keep a daily record (perhaps in the form of a graph) to show the status of his or her securities. They should try to explain price

changes, especially if the changes are major ones. After a particular period (such as a month or six weeks) have the students "sell" their stocks and determine how much they gained or lost. Why did some do better than others? [If time permits, students might also consider how much they had to pay in commissions to their stock brokers, how much they might have received in dividends (and what the yield was), and the price/earnings ratios of their stocks.]

Consider establishing a classroom company to produce a product or service. Have the class discuss goods or services that they might produce and sell, conduct market surveys to see if there will be a demand for these items, and determine what it will cost to produce them. Perhaps they can form a "classroom corporation" and sell stocks to raise the money capital needed to start the business. Officers should be appointed or elected -- president, vice-president, treasurer, marketing manager, production manager, etc. Records must be kept of all costs (including explicit or implicit wages for everyone who participates). Decisions will have to be made on how best to organize for producing goods. Shall we have assembly lines? Work in teams? Work on an individual basis? Marketing strategies should be developed and an "ad" campaign conducted. After the goods have been sold, determine how much of a profit was made, if any. If there was a profit, some must go to the stockholders as dividends. Any funds that were borrowed must be repaid. Hold a lengthy discussion on how the classroom enterprise was similar to, and different from, a "real life" business. (In a "real life" company there would be taxes to pay, unions to deal with, government regulations to cope with, etc.)

To teach about market structures, ask students to identify business firms that they or their families deal with often, and try to determine how much competition each firm faces. Note that they must also identify the market and industry in which each firm is involved. Then try to decide which of the firms are in perfect competition, monopolistic competition, oligopoly, and monopoly. (These terms must be clearly defined in advance of this exercise.) In each case ask whether the students, as consumers, would be better off if a different type of market structure prevailed. Would they pay less for electricity if the electric power industry were perfectly competitive? Why, or why not? Would they get cheaper and better cars if the automobile industry was not an oligopoly? Discuss businesses operated by students, such as baking and selling cookies, mowing lawns, or baby-sitting. Those selling cookies are probably classified as monopolistic competition. (There are probably many other sellers of cookies in the area, but there is undoubtedly some product differentiation. The students' cookies are not likely to be identical with the cookies sold by others.) If there is only one student in the town who mows lawns, and no one else will do this kind of work, that student may have a monopoly. But can he (or she) charge any price? (Probably not, because demand is not perfectly inelastic. If the student sets the price of mowing a lawn too high, people will mow their own lawns.) Students who plan to form their own business when they leave school should consider which type of market structure prevails in the industry in question and how they must take this into account in planning their own operations.

Have students make case studies of businesses that interest them, including some that may not be regarded as business enterprises -- such as a rock band. What kind of capital does a rock band need to get started? How does it establish a market for its service? How does it set a price for its service? What sort of competition does it face? What are its costs; and which of the costs are fixed and which are variable?

III. Labor in the Economy

Most students will be entering the labor force, if they have not done so already. Ask each student to study the occupation that he or she plans to enter. What is the typical wage or salary in that occupation? What kinds of fringe benefits exist? What are the working conditions like? Is there a union representing the workers in this field? What are the chances for advancement? Students might interview people who are already working in their chosen fields, as well as using printed material. They must learn what kind of education or training one needs to enter the field. To what extent will there be a demand for people in this field in the future? (See the publications of the U.S. Bureau of Labor Statistics for the latest information on this. Major newspapers sometimes publish special sections on job prospects, such as Careers: The Outlook for Employment in The New York Times and Career Forum in Long Island's Newsday. Many useful publications can be obtained at reasonable prices from the Social Studies School Service, P.O. Box 802, Culver City, California 90232-0802. Ask for their latest catalog of materials on Guidance & Career Education.)

Have students do research and write a report on how their occupational choices relate to the economy as a whole. How will a student's chosen occupation be affected by the business cycle? Do workers in that field retain their jobs during a business slump, or can they expect to become unemployed? Will the student be working in a growing industry or one that is stagnant or in decline? How might the industry be affected by international economic situations? How can the individual student try to protect himself/herself from the possibility of unemployment? (One way is to try to become more efficient and productive.)

Each student should study the union situation in his or her chosen field. Will the student be expected to join a union? If so, which one? What benefits can the student expect from union membership? What obligations will membership impose? If the student will not join a union, how might he or she be affected by unions? Will the student be in a position where he or she must deal with a union in some way? Those who will be joining unions might be able to obtain information from union officials and/or from rank-and-file members of the union. (Many pamphlets are available at little or no cost from the AFL-CIO, 815 16th St., N.W., Room 208, Washington, D.C. 20006.)

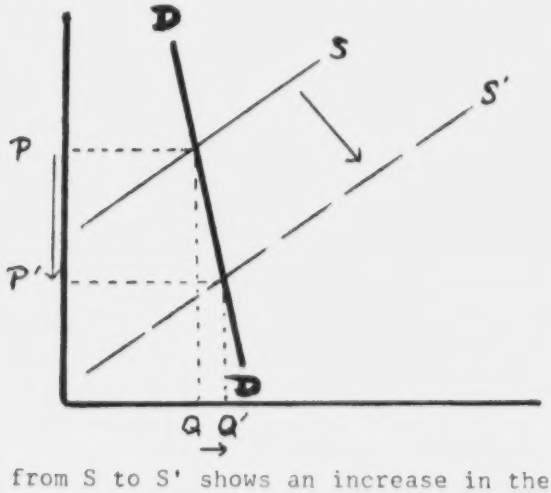
Conduct a collective bargaining simulation in which students play the roles of workers, managers, union officials, and possibly third-party mediators or arbitrators. Clearly set forth the differences between labor and management, the demands being made by each side, and other relevant conditions. Have students read some existing union-management contracts to get a realistic view of the kinds of issues that are dealt with in such negotiations. In preparing for their roles, the students might interview union officials, management people, and others who are experienced in labor-management relations.

Teachers on Long Island can request the program Labor Unions and the American Worker from the Old Westbury office of Cornell University's School of Industrial and Labor Relations. Call 876-3040 and ask for Eileen Zanar for information. Labor experts visit the classroom and conduct role playing and simulation activities.

IV. Agriculture in the Economy

Ask the students to list the things that they and their families use frequently that have been provided by agriculture. In addition to such obvious items as cereal, eggs, and fruit, be sure that they include non-food goods such as cotton, wool, leather and things that use agricultural products for raw material. Put a comprehensive master list on the chalk-board, using two columns. One column should be for things that are necessities; the other for items that are not necessities. The lists will show how important agriculture is to the students' lives.

The two columns can then be used to discuss the importance of elasticity of demand to the farmer. Demand is inelastic for many agriculture items. This implies that farmers cannot increase their incomes by raising their output. That is, farmers might raise 50% more potatoes, but they will not sell the additional output unless they lower their prices by more than 50%. Ironically, farmers who become more productive often find their incomes dropping. The graph below can be used to analyze the situation.



The shift from S to S' shows an increase in the output of a farm product, perhaps because of the adoption of new techniques, modern machinery, and better fertilizer. Demand is inelastic, however, as indicated by the very steep demand curve (D-D). The market price plunges from P to P', while the quantity sold increases only slightly from Q to Q'. The farmers will be worse off than they were before they increased their output, as their total revenues will drop. [This is a good example of how the use of graphs can help us to analyze and explain an economic problem.]

Invite someone in agriculture to visit the class and explain the problems faced by farmers. How is agriculture often different from other industries? (Examples: Manufacturers can often shift production and even change to a different product when demand and price change, whereas the farmer who has planted a crop must wait many months to make a change. A factory may be unaffected by the weather, while a farmer's crop can be ruined by it. Farmers are often producing in markets that are close to being purely competitive, but buying their machinery and supplies in markets that are oligopolies.)

After the farmer's case has been presented, and government aid to agriculture has been explained, point out that the federal price support program has added about 45¢ to a three-pound jar of peanut butter, 15¢ to a half-gallon of ice cream, and 60¢ to a five-pound bag of sugar -- additions to the price consumers would pay in purely free markets. Now ask the class if they consider farm price supports to be justified. (If necessary, the teacher can play "devil's advocate" and point out that many industries receive some sort of government aid, although it is not as obvious or as highly publicized as the farm program.)

Show the film "Perfect Competition and Inelastic Demand: Can the Farmer make a Profit?" from the series ECONOMICS USA. See the Economics USA: A Resource Guide for Teachers book, pp. 71-87, for many ideas for teaching about the farm situation.

V. Public Goods and Services

As a homework assignment, ask the students to list all the government goods and services that they and their families use. Ask them to use three columns headed "Federal," "State," and "Local." They must also determine whether they benefit directly or indirectly from the items. For example, under "Federal" one might list Social Security payments to a retired family member as a direct benefit, and the general national security provided by the military as an indirect benefit. Many of the most direct benefits will be under the "Local" heading, such as public libraries, parks, police and fire protection. (Some of the items might be direct benefits for some people, but indirect for others. For instance, those who drive on state highways are deriving direct benefits from the highways. A motel owner who does not use the highway can benefit from it indirectly if it brings tourists to the area.)

Note that some services are both public and private, such as health care. Ask the class for examples of things that are provided by both, and to explain these phenomena. In each case, ask for opinions on whether the students would prefer to use the public or the private facility and why. You might get a lively discussion on the question of forcing people to help pay for services they do not use. Should adults who have no children be required to pay school taxes? Should people who send their children to private or parochial schools be exempt from paying school taxes? Should you be required to pay taxes to support a public library that you never use? A public park? Etc. [In a discussion of these questions, be sure to consider possible indirect benefits that people might derive from a facility or service they do not personally and directly use. For example, a childless business owner does derive some benefit from the public schools because they teach people skills that enable them to become productive employees.]

Divide the class into two groups. One group should answer this question: "What would you like government (federal, state, or local) to do that it isn't doing now? Who would benefit by this? Who would pay, and how?" The other should answer the question: "What government service (federal, state, or local) should be reduced or discontinued? Who would be affected, and how?" Have each student present his or her proposal, and ask other students to react. Encourage impromptu debates between students or groups with opposite views on specific proposals.

Everyone is affected by government regulations. Ask the students to write down every government regulation (federal, state, or local) that somehow affects the student or the student's family. They must also tell whether they approve or disapprove of each regulation. Students should also consider regulations that might affect them in the future. (For example, is a student planning to enter a profession that is licensed by the state? Is the student planning to start a business? If so, must he or she obtain a permit from the state or local government?)

Discuss conflicting goals pertaining to government regulations. For example, students often support the goal of a pollution-free environment, but oppose some of the regulations that might help to reduce pollution, such as the 55-mile speed limit. Confront the class with conflicts of this type, asking them to note the trade-offs involved.

A lively discussion might be initiated by raising such questions as: "When do government protections become oppressive? For example, there are laws that prevent you from working at certain jobs until you are an adult. Do you see these laws as wise policies to protect your health and welfare, or as government interference with your right to work?"

The subject of taxes can be introduced in this unit, although taxes are considered in greater detail later in the N.Y. State curriculum. Use the program "Understanding Taxes", which consists of a video-tape that contains nine 15-minute episodes, plus lesson plans and material for students. Check with your school's media center, which should receive this program. If it is not already available in your school, write Understanding Taxes, Internal Revenue Service, P.O. Box 1400K, Dayton, OH 45414. The video-tape episodes that can be related to this unit are numbers 3 ("Making Federal Tax Laws"), 4 ("Taxes Raise Revenue"), and 7 ("Taxes Involve Conflicting Goals").

To teach benefit/cost analysis, return to the exercise suggested at the bottom of page 23, wherein students were asked to propose additional government services. Select one or two proposals that most students supported and ask the class to determine who would benefit from the new program(s). Then try to determine what the costs would be and who would pay those costs. (This exercise might be easier if you use programs that would be conducted by the local government, such as a new public park or playground. Be sure to use the opportunity cost principle. For example, one of the real costs of using a piece of land as a playground is that it can't be used as a parking lot.)

Illustrate the subject of externalities by asking students to give examples of negative and/or positive externalities that affect them personally. For example, someone living near an airport might be disturbed by the noise of the planes -- a negative externality if that person is not involved in the selling or buying of air transport services. (Some of the effects of such externalities are measurable. The market value of a house near an airport may be $5,000 less than the value of a comparable house in a similar neighborhood that is not affected by the noise of the planes, for instance.) Discuss what actions, if any, governments should take to deal with externalities. [To provoke a heated discussion, point out that individuals create negative externalities also. People who play their radios loudly in public, fail to put their trash in litter baskets, smoke in the presence of non-smokers, or drive their vehicles in a dangerous way are examples.]

UNIT 3: BRINGING THE ECONOMIC SYSTEM TOGETHER (MACROECONOMICS)

I. Measuring the Economy

To introduce aggregate economic measures distribute 3 x 5" index cards or small slips of paper and tell the students to write down the amount of money they earned last year by working or by selling goods that they produced. Assure them that each report will be confidential unless the student chooses to reveal his or her income. Add the amounts and put the result on the chalk-board, calling it the "Gross Class Product." Explain that if the class were a country this would be its Gross National Product (GNP) or the total money value of the goods and services the class produced and sold in the marketplace. Discuss the reason for not including gifts of money that students received. (These are "transfer payments" and do not help to show the value of what the student produced.) Hold a discussion on how this aggregate measure can be used. In the case of the "Gross Class Product" it might be used to compare the output of this class with another class to see who contributed most to the American economy. It could be used to compare last year's output with the output of the previous year.

After completing the above exercise, explain that each student who has produced and sold goods or services has contributed to the nation's output or Gross National Product (GNP). Draw a circle on the chalk-board and label it "GNP." Refer to it as our "great national pie" that contains all the final goods and services we produced in one year. Explain that it is usually expressed in current dollars, the amount of money it would take for someone to buy all the final goods and services the nation produced in that year. Explain also that we all get a slice of this pie, in the form of the goods and services that we consume.

Return to the first exercise suggested above to teach the concept of GNP expressed in constant dollars. Select some of the goods or services that the students produced and sold to use as examples. For instance, a student baked and sold 100 cakes and sold them for $4 apiece. This year the student bakes 100 cakes and sells them for $5 apiece. Last year the student's contribution to the "gross class product" was $400. This year it is $500, but the student did not increase the output of cakes -- he or she simply charged more for the product. Ask the class to explain how this price increase could distort the "gross class product" figure and create the impression that the "class economy" had grown more than it did. Point out that the same situation exists with the GNP, and that to get a true picture of economic growth we must adjust the GNP to account for inflation (increase in average prices). This gives us the "real GNP" or "constant dollar" GNP.

To teach about per capita GNP write on the board the dollar figure that was derived from the first exercise on this page -- the "gross class product." Divide this figure by the number of the students in the class, and explain that the result is the "per capita class product" or the amount that each student would receive if it were divided equally. Now state that five new students join the class, and that these are students who have produced nothing. How does this change the per capita (per head) "gross class product"? Then show that the same principle applies to the GNP for the United States.

To show weaknesses in the GNP, again return to the first exercise on page 25. Remind the students that you counted only the goods and services that were produced and sold in the marketplace. Ask students to name the goods and services they produced but did not sell, such as cookies baked and consumed by the family, and mowing one's own lawn. Discuss whether or not the value of these services ought to be included in the "gross class product" and, indeed, in the GNP. Many will say that they ought to be included, because they do add to the nation's wealth. Why, then, are they not included? (Because most non-market transactions are not recorded, it is impossible for the government to get an accurate measure of them.) [Some other problems with the GNP can be noted as well. For example, the quality of a product may change while its price remains the same; but the GNP would account for the price only. Some of the goods and services counted in the GNP are actually harmful. Should this "illth" be subtracted from the GNP to give us a better measure of our output of "wealth"?]

The business cycle (the periodic ups and downs in the economy as a whole) can be related to student career plans. Ask each student to consider the occupation he or she plans to pursue and to try to ascertain how it might be affected by the business cycle. Are you apt to lose your job during a business slump, or will there be a demand for your services regardless of how the economy is doing? (Note that teen-age workers are often hardest hit during a recession or depression.) [Relate this subject to the GNP by pointing out that the real GNP is an important measure of where the economy is headed. If the real GNP declines for two consecutive quarters (six months) we are in a recession. The term "growth recession" is sometimes used to describe a period when the real GNP is rising, but at a slower rate than in the past. There is no generally accepted and precise definition of depression, although some say it is a decline in real GNP that lasts a year or more. In any event, it is more serious than a recession because it is usually longer and deeper.]

For an assignment, ask students to interview their grandparents or other people who lived through the Great Depression of the 1930s. How were they affected by it? What was it like to live during this period? You might also invite someone who has vivid and poignant memories of the 1930s to speak to the class. How might teen-agers be affected if another depression of this magnitude occurs? How can individuals try to prepare to protect themselves from the effects of recessions and depressions? (Getting a good education, for example.

Have students read Milton Meltzer's book Brother, Can You Spare A Dime? (Mentor Books, 181 pages) for a vivid account of the impact of the early days of the Great Depression (1929-1933) on people. You might also show the videotape "John Maynard Keynes: What Did We Learn from the Great Depression?" from the series ECONOMICS USA. Many films, video-tapes and other materials on the Great Depression are available from Social Studies School Service, P.O. Box 802, Culver City, Calif. 90232-0802. See their latest catalog. The LP record "Songs from the Depression" (Folkways Record FH 5264) uses music to describe conditions in the 1930s. The recession of the early 1970s is described in a humorous but poignant manner in the LP Record "Hard Time Hungrys" (RCA Records APL-1-0906). In addition to the songs, there are brief interviews with people who lost their farms, homes, or jobs.

II. Money

To initiate a discussion of the nature of money write on an index card: "I will pay to the bearer, on demand, the sum of one United States dollar." Read this to the class and let them see you sign the card. Tell the class that any person who obtains the card can return it to you at any time and receive one U.S. dollar. (Show them a dollar bill in case they doubt that you can back it up!) Then ask: "Who will give me 5¢ for this card?" (If nobody will buy it, remind the class that the person holding the card can immediately return it to you and get one dollar.) After someone has offered 5¢, ask: "Who will give me ten cents?" Keep the bidding going until no further offers are made. The price will usually reach 90¢ or 95¢. Give the card to the highest bidder, who will most likely return it to you immediately and get the dollar. Now ask the class: "Is this card money?" Usually there will be some who say that the card is money, and some who say it isn't. This will engender a discussion of the nature of money. Some will argue that the card was found to be acceptable to several people, and thus acceptability is a major criterion. Others will reply that it would not be accepted outside the classroom and thus does not have general acceptability. (There is not "right" answer. Even if nobody bids on your card you can start a discussion by asking: "Will anybody give me 5¢ for this one-collar bill?" Everyone will. Then ask: "Why would you want the U.S. dollar but not my card?" Again, no matter what happens, you can initiate a discussion of money.)

To show the importance of money as a medium of exchange arrange for a barter session in the classroom. Tell each student to bring to class an object that he or she would like to swap. Provide each student with a form upon which he or she will record each attempt to swap an item. For example:

Items I Offered	Items that Others Offered Me
Pair of ice skates	John offered 3 record albums
	Bill offered a catcher's mitt
	Bob offered a warm-up jacket
A "NY Mets" T-shirt	No offers

After the barter session (15 or 20 minutes) collect the forms and hold a discussion on the experience. How many students are satisfied with their "deals"? What problems did they encounter? How difficult was it to get agreements on the value of an item? How much more convenient would it have been if money had been used both as a medium of exchange and a standard of value? Suppose that we tried to do everything through barter?

In your next lesson after the barter session, deal with the forms of money. Ask students to suggest things that might be used as money, pointing out that people often invent some kind of money as the need arises. (Soldiers in wartime prison camps used cigarettes as money, for example.) Discuss the advantages and disadvantages of each item that is suggested. For instance, specific commodities often fail because their value as commodities becomes confused with their value as money, they may not be durable, it may be hard to control their supply, etc. It should be clear that people prefer paper money, even though its intrinsic value is very low, and that checks are a most important form of money.

To show how banks help to create money use the teaching kit "Making Money in Middle Village," available from the Federal Reserve Bank of N.Y., Public Info. Dept., 33 Liberty St., New York, N.Y. 10045. A large wall chart and teaching guide describe the process by which money is created when banks extend loans and create demand deposits. See the Fed's catalog Public Information Materials for a list of other materials that can be used for this subject. Those in comic-book format are particularly appealing.

Teach your class how to open and use a checking account. The film "You're Accountable" would be useful for this, especially the second segment entitled "Spending." Check your school library, teacher resource center, BOCES, or public library for the film and the accompanying material. If not available from these sources, write Media Services Distribution Center, Bldg. 8, Research Park, Cornell University, Ithaca, N.Y. 14850. (Tel. 607-255-2091.)

Having learned that banks create a major part of our money supply, students will naturally be concerned about the safety and stability of our money. A study of the Federal Reserve System is needed at this point. (See the catalog cited in the first paragraph on this page for some excellent materials about the Federal Reserve.) Two films in the ECONOMICS USA series would also be useful: "The Banking System: Why Must It Be Protected?" and "The Federal Reserve: Does Money Matter?" Invite a local banker to speak to the class on the way in which his or her bank is affected by the Federal Reserve.

Conduct a discussion on how students use banking institutions. Ask the class if anyone has a bank account. If some do have accounts, ask them to tell what type of institution holds the account (savings bank, savings and loan association, or commercial bank), and what type of account it is. Why does the student have this type of account? Is the money safe? Why, or why not? Ask the students to consider how they might using banking institutions in the future -- for college loans, to borrow for a car, to obtain money to start a small business, and so on. List and describe the types of institutions that might help them. (Again, see the film "You're Accountable", cited in paragraph 2 above.)

Have each student develop a personal financial plan and learn how different financial institutions can play a role in carrying out that plan. Ask the students to identify the various financial institutions in the immediate area, to obtain material from those institutions, and to learn how each one serves the community and might be of service to the individual student. They might also try to learn how these institutions are affected by the Federal Reserve.

To teach about interest rates, have the students list some very expensive items they would like to buy but cannot afford, such as boats, cars, and computers. Ask them to list the prices of these items. Then tell them to pretend that they are going to borrow money to buy one or more of the items. Where and how would they obtain a loan? How much interest would they be willing to pay? How might the interest rate affect their decisions to buy? What actions by the Federal Reserve might result in their paying more (or less) for the item?

Arrange for students to interview managers of firms that are affected by high interest rates, such as building construction companies and automobile sales establishments. They should ask how business is affected by high rates, and how the firms try to cope with the problems. How are the consumers affected?

III. Unemployment, Inflation and Distribution of Income

The rate of unemployment is usually high for teen-age workers. Obtain data comparing the teen-age unemployment rate with the rates for adult workers. [Call the U.S. Bureau of Labor Statistics (212) 337-2410 for information on unemployment rates.] Discuss these figures with the class, asking them to try to explain the high rate for teen-agers. (Lack of experience, less training and education, immaturity, etc.) Then discuss what the students might do to protect themselves from unemployment.

For a practical project, have the students make a study of the jobs available in the area. They can study the "want ads" in newspapers, visit employment agencies, etc. Make a file of job openings in different occupational categories, with information on the rates of pay, the preparation needed for each job, where and how employment can be obtained, etc. This file could be a useful tool for graduating students. You might also teach them how to write letters of application, prepare a portfolio, obtain recommendations, and fill out job application forms. Some simulated job interviews in the classroom would also be helpful.

Conduct a class study of the problem of unemployment in your area. What is the unemployment rate in your town, county, or region? Is it better or worse than rates elsewhere, and why? What are the causes of unemployment in the region? What is being done about it? [For information on how to study the economy of a region, see Sanford Gordon's The Economy of New York State. Cincinnati: South-Western Publ. Co., 1987. The book was written for high school use. A teacher's manual is available as well.]

After students have learned about the functional distribution of income, ask each student to consider whether his or her future income will be made up of wages, interest, rent, or profit -- or some combination of these. The students can try to estimate what their incomes will be for the first year that they are employed or operating their own businesses. They should learn what factors influence incomes. In particular, they should be aware of productivity. Supply and demand are very important, but demand is often strongly related to productivity -- the more productive worker is often the one who receives the highest wage or salary. Have them examine the wages paid for various jobs in the area and try to explain why some are much higher than others.

Some people receive transfer payments -- income that is not in payment for goods or services. Gifts of money, welfare payments, social security payments, and unemployment insurance are examples of transfer payments. Since such payments often come from taxes paid by those who did produce goods or services, students will often engage in heated debates on the "fairness" and need for transfer payments. This can be related to a study of the problem of poverty and to government fiscal policy.

Examine the poverty situation in your area. There is usually a certain amount of poverty even in the most affluent of places. To what extent does poverty exist in your town, county, or region? What causes it? How are others affected by it? (For example, is crime in the region associated with poverty? Are local taxes higher because of the need to help the poor?) Discuss what might be done about the problem.

To show the students that they are affected by inflation, select several goods and services that teen-agers often use and determine their prices now as compared with a specific year in the past. You might prepare a form for this, such as the one below, and ask the students to interview their grandparents or other elderly people to find out what the items cost in the past. Or, you might take the year in which you were a 12th grader and tell the class what you paid for each item in that year. The absolute and percentage change can be computed for each item. The following example gives the result of an exercise of this type with one class in 1982.

PRICE CHANGES

Item	1982 price	1937 price	Difference	% difference
Candy bar	$0.35	$0.05	$0.30	7x
Bus ride	.75	.05	.70	15x
Movie	2.00	.10	1.90	20x
Hot dog	.95	.05	.90	19x
Soda	.40	.05	.35	8x
Ice cream cone	.60	.05	.55	12x
Quart of milk	.60	.10	.50	6x
Newspaper	.25	.02	.23	12.5x
Visit to doctor	30.00	1.00	29.00	30x
Totals:	$35.90	$1.47	$34.43	24.42x

(The "% difference" column was obtained by having the students divide the figure in the 1982 column by the figure in the 1937 column; thus a candy bar cost "7 times" as much in 1982 as in 1937. The 1982 prices were those expressed by the students; the 1937 price was given by the teacher, who had been a teen-ager in 1937.)

Many discussions could be developed from the above exercise. Although it is crude and unscientific, it can be used to introduce the concept of the consumer price index. Ask each student to select a product or service that has increased in price in recent years, and to compute a price index for that item. For example: In 1984 the price of a movie in Mary's neighborhood theater was $4.00. Today the price is $5.00. Mary will divide today's price of $5 by the 1984 price of $4 and multiply the result by 100, giving her an index of 125. This shows that today's price is 25% higher than the price during the base period (1984, in this case). (Of course, this applies only to this particular theater. Be sure to explain that the government's CPI -- Consumer Price Index -- is based upon samples of a great many goods and services. Note also that the CPI "weights" items to account for the fact that the typical consumer devotes a greater percentage of his or her income to some items than to others. Most college texts and some high school texts explain how the CPI is computed. If you teach the procedure to your class, have each student construct a personal CPI by taking the items he or she commonly purchases, selecting a base period, weighting each item, and then computing a "mini-CPI" to show the extent to which the student's "cost of living" has changed.)

After the students have determined their "personal consumer price indices" as suggested above, ask them to see if their incomes have kept up with price increases. That is, they should compare their incomes for whatever base periods they selected (such as 1984) with their current incomes. (Student incomes might consist of their allowances, money they earn, gifts of money,

and interest on savings accounts or savings bonds.) If their money incomes did not increase by the same percentage as their consumer price indices, then their real incomes have declined. Example: Jim's money income increased by 10%; but the average prices of the things Jim buys increased by 15% over the same period. Jim has more money but that money will buy less than it would in the past; hence, Jim's real income has dropped. Jim is a victim of inflation.

Be sure the students understand how to use the CPI. A simple explanation is: "If the CPI is 120, you must spend $120 today to buy the same goods and services you got for only $100 during the base period. In general, prices have increased by 20% -- but this does not mean that every item in the CPI has increased by 20%. Some things have risen by more than 20% and some by less. Some items may actually have declined in price." Have students use the CPI to make adjustments for inflation. Examples: Ask students who have savings accounts or CDs to indicate how much interest they received last year and to calculate the yield in percentage terms. For instance, Mary's $1000 CD grew to $1,070 -- a yield of 7%. But average prices rose by 5%: thus the real interest was only 2%. Jack's income from his summer lawn care business increased by 3% over the previous summer. But since prices rose by 5%, Jack's real income actually declined.

A major cause of inflation is an increase in the money supply. To illustrate this, describe a product that the students would certainly want to buy; and ask them to state how much they would be willing to pay for that item, considering their current incomes and savings. After the various amounts have been listed, compute the average price of the item. Then tell the students to pretend that the government has decided that everyone's income should be doubled. Now how much would they be willing to pay? Most will offer a higher price, so calculate the new average price for the item. Ask students to identify the cause of the price increase. It should become apparent that if the supply of money increases, while the supply of goods does not, prices will rise. [Some economists will assert that no other cause need be set forth. However, classroom discussions after this exercise have resulted in students suggesting a variety of possible causes -- too great a demand; too little supply; lack of competition among sellers; outright monopoly; too much use of credit; too much government spending; low productivity; high costs of production (high wages, fuel costs, interest rates, etc.); inefficiency; our tendency to waste food and other goods; costly government regulations; expectations of future price increases; our low savings rate; and even crime. Many of these are related, and each can be discussed as to its importance.]

A practical activity is to discuss how the students might protect themselves from the effects of inflation. Increasing their own education, efficiency, and productivity should be stressed, as this can help to raise their incomes to keep up with price increases. Becoming intelligent consumers is another factor. Students should develop a savings plan, and learn how to search for investment opportunities that offer yields high enough to keep ahead of the rate of inflation. Finally, as citizens, they can support public officials and public policies that will help to control inflation. (Fiscal and monetary policies are dealt with in other lessons but can be referred to at this point.)

IV. Government Decisions Affect Unemployment and Inflation

Before beginning this section, be sure that the students have grasped the meaning and importance of the problems of unemployment, inflation, and distribution of income, and that they see their own personal stake in these problems. In dealing with poverty, for example, you might ask the students to take the latest government figure for the poverty line and draw up a budget for a family of four, using that figure. What kind of adjustments and sacrifices would their own families have to make if their incomes were at the poverty line?

Make a study of existing government transfer payment programs, listing and briefly describing each program. Do any of these affect the students or members of their families? (Be careful at this point not to embarrass students who might be receiving welfare payments. If students are asked to list any such payments that they or their families receive, do not ask them to identify themselves on their papers or during class discussions.) Most students will probably have relatives who are retired and receiving Social Security payments. How are these programs paid for? Who benefits, and how? You might have debates on whether such programs ought to be expanded, modified, reduced, or discontinued. How might such programs affect the economy as a whole? (Example: Might help to stimulate the economy during a recession, for a positive result; but might induce people to save less, for a negative result.)

In 1988 it was reported that the number of poor people who had given up looking for work because there were no jobs for them was about six times as great as the number 20 years ago. In short, many able-bodied people are unemployed, although they want to work. Some economists blame this on structural changes in our economy, such as the development of high-technology industries that require highly trained and skilled workers; and the growth of service-type industries that also require educated and skilled people. Have the students make a study of the changes that are taking place in our economy, and how those changes might affect their own prospects for jobs and careers. How can each student plan for the future to avoid becoming one of the "working poor" who cannot find jobs that will provide an adequate income? To what extent should government play a role in dealing with the problem of the "working poor"? This could be the subject of a debate in the classroom.

Ask students to write down the amount of money they have to spend each week (or month). (They need not reveal these figures to the class as a whole, unless they choose to do so.) Then ask them to write down the amount, if any, that they save each week (or month) and to compute the percentage that is saved. Now tell that to assume that they will suddenly receive an additional amount of money, either because of a tax reduction, a bonus, a gift, or some other increase in income. Ask them to write down the amount of this extra or marginal income that they would save, and to compute the percentage of the extra income that would be saved. Tell them that this is their marginal propensity to save, while the amount (or percentage) they would spend is their marginal propensity to consume. You might list these spending/saving decisions and compute an average for the class. Now point out that our economy as a whole is affected by the spending/saving decisions of the people. Be sure that the

students understand that every time someone spends money, income is being created for someone else. Thus, one dollar is counted as income every time it goes from one person to another, so that one dollar can result in several dollars of income before it disappears into savings. This is the multiplier effect. If a dollar changes hands five times, it becomes five dollars in income, and the multiplier is five. Ask the class to try to figure out how this fact can be of great importance to the government if it wants to stimulate the economy. (If the government wants to increase the national income by 100 million dollars, it can achieve this by increasing its own spending by only a fraction of that amount.)

To illustrate the workings of the multiplier, tell one student that he or she has just received $100 as a tax refund that was not expected. Inform the class that the marginal propensity to save is .50 -- on the average, people spend half (50%) of any extra income they receive and save half (50%). The student who received the $100 must now pretend to save $50, and spend the remaining $50 by passing it along to a 2nd student. The 2nd student will save $25 and spend the remaining $25 by passing it along to a 3rd student. The 3rd student will save $12.50 and "spend" the remaining $12.50 by giving it to a 4th student. The process will be repeated until it can go no further (involving about 14 students). Keep a record on the chalk-board of each step, using one column for "Spending" and another for "Saving." Now ask the class to add the figures in the two columns, and remind them that the "Spending" column could also be called "Income" because each time money was spent it became income for someone else. The result will be that the original $100 is multiplied by 2, becoming $200 in income. Now inform the class that you need not go through this tedious process to figure out how much the nation's total income will expand when new spending occurs. All you have to do is take the reciprocal of the marginal propensity to save and multiply the original amount by this figure. In this example, the MPS is .50. To find the reciprocal, divide 1 by the MPS. In this case, 1 divided by .50 is 2. The original $100 multiplied by 2 is $200. Now return to the marginal propensity to save that was derived from the previous exercise -- the average MPS of your class. What would the multiplier be if everyone in the United States had the same marginal propensity to consume or save? (For example, if your students said they would save -- on the average -- 20% of their income, then the multiplier would be 1 divided by .20, or 5.) How would an increase or decrease in the MPS affect the government's ability to stimulate the economy? Suppose that the government is trying to control a serious inflation. Would the government want a higher or lower MPS in this case? (Higher, because the more that people save, the less demand for limited supplies of goods and services and hence less pressure on prices.)

Divide the class into two groups. Group 1 will play the roles of unemployed people, who are the victims of a slump in the nation's economy. Group 2 will play the roles of people who are employed but who find that prices are rising much faster than their incomes. They are the victims of inflation. Have each group examine the government's fiscal policies and the Federal Reserve's monetary policies and recommend actions that should be taken. The first group will probably want the government to lower taxes and increase its own spending in order to stimulate the economy and create jobs. It will want the Federal Reserve to put more money into the economy by lowering the discount rate, reducing the reserve requirement, and buying government bonds in the open market.

Group 2, on the other hand, should want government to reduce its own spending and possibly even raise taxes. It will expect the Federal Reserve to raise the discount rate, increase the reserve requirement, and sell government bonds in the open market. Let each group present its case and then debate these different recommendations.

After the above exercise has been completed, ask the students to examine their personal or family situations and decide which policies would be best for them and why. Each student should try to answer such questions as:

"How might it affect me if the government and/or the Federal Reserve stimulate the economy?"
"Suppose the Federal Reserve raises interest rates to try to control inflation. How will this affect me or my family?"
"Will I be able to get and keep a job if fiscal and monetary policies cause a slow-down in the economy?"
"What is worse -- the prospect of inflation or unemployment?"
"In the event that taxes are raised to control inflation, whose taxes should be increased?"

(During classroom discussions of the above questions, try to get students to consider the long-run effects of their conclusions. For example, most will not want their own or their family's taxes to be increased because they see such an action as reducing their spending power. However, they ought to know that in the long run a tax increase now might halt inflation and thus protect their purchasing power in the future. They might oppose tax cuts for business, not realizing that such cuts can stimulate investment that will increase the supply of goods in the future and possibly result in lower prices for those goods.)

V. The Criteria of a "Good" Tax

Directly or indirectly, nearly everyone pays taxes. Ask students to examine their own incomes and expenditures and to list and describe the taxes they pay. Some of the obvious ones are sales taxes on most purchases, excise taxes on gasoline, and any income tax paid on their earnings. Students who have kept records of certain expenditures (such as gasoline for their cars) should try to determine what percentage of total expenditures are accounted for by taxes. Have a general discussion on whether or not they consider these taxes to be "fair", and what criteria they are using to determine fairness.

Have students list the various benefits they get from government, such as the public facilities they use and the government services that are available to them. Hold a discussion on how these things should be financed. Should people have to pay fees to use a government facility, such as a public park or a library? What about the public school? Or should these things be supported by taxes? If taxes are to be used, who should pay them?

Use the teaching kit Understanding Taxes, which was produced by the Agency for Instructional Technology, Box A, Bloomington, Indiana 47402 ('phone: 812-339-2203 or 800-457-4509). First check your school's media center or library, as every school should have received a set. The kit contains a video tape with 9 lessons on various aspects of taxation, plus other material that can be used to teach everything from theories of taxation to filling out your federal tax return. (The examples are aimed at teen-agers.)

Ask students to list goods that they buy regularly and that are subject to a sales or excise tax. Have them check the items that they consider to be necessities, such as gasoline for those who must drive to work or school. How much do they spend on these items each week (or month), and how much do they pay in the sales or excise tax? Now ask the students to write down their weekly or monthly incomes, and to figure out what percentage of their incomes is taken by the tax. Compare the results for students whose incomes differ, but whose tax payments are about the same. It will be clear that the tax takes a greater percentage of some incomes than of others, even if their expenditures on the taxable items are very similar or identical. How should this tax be categorized? (Some may argue that it is a proportional tax because everyone pays the same percentage of a given expenditure, such as 7%. Others may say that it is regressive because it takes a larger percentage of the incomes of the students with lower incomes. Do they consider the tax to be fair? Why, or why not?)

Students should learn that the person who hands the tax to the government is not always the person who bears the burden of the tax. Have them examine the various direct and indirect taxes that affect them and decide which ones are being shifted. That is, what is the incidence of the tax? (Who really bears the burden of it?) This is a good time to remind the class of the concept of elasticity by applying it to taxation. A tax levied on a business that produces items that have an inelastic demand can be passed along to the consumer in the form of higher prices for the product. If demand is elastic, however, the business will bear more (or perhaps all) of the burden of the tax. If they try to pass it on to the consumer, sales will drop and so will revenues. To illustrate the point, ask the students to identify things that they would continue to buy even if the price is increased, and things that they would stop buying (or buy much less of) if the price rises. Now look at the taxes the students pay, including sales, excise, and income taxes. Ask them to identify any taxes that they can shift to others. In most cases they will probably have to bear the burden themselves. (For a possible exception, consider the student who runs a summer lawn care business. When he or she buys supplies and pays a sales or excise tax on them, that tax is probably passed along to the consumer in the form of higher fees for the services the student is providing.)

Invite a tax accountant to visit the class and explain how the current tax law affects children and teen-agers. (One part of the new tax law is being called the "kiddie tax" because of its effects on children. See the article "Taxing Children: Reform Takes Aim at Kids" in Newsday, Jan. 28, 1988, p. 57.)

Examine the different uses of taxation. In addition to raising revenue to pay for government services, taxes can be used to achieve a variety of goals. Among these are: (1) Redistributing income -- taxing those who are relatively well off to provide aid to the poor; (2) controlling consumption -- taxing items that are considered harmful to consumers to discourage their use; (3) aiding businesses -- encouraging businesses or industries that are considered beneficial to the economy by reducing their tax liabilities and/or giving them subsidies; (4) stabilizing the economy -- raising taxes to control inflation; lowering taxes to help stimulate the economy during a recession; (5) protecting domestic industries from foreign competition -- tariffs make foreign goods more expensive and thus enable domestic firms to capture a larger share of the domestic market (but at the consumer's expense). Discuss each of these in terms of how the students might be personally affected by each tax. (The tariff can be discussed more fully in Unit 4.)

Should a tax be based up benefit derived or ability to pay? In a discussion of this issue, use a tax that affects the students directly, such as the school tax. Ask the class to tell who benefits from the public schools, directly and indirectly. Is it "fair" to require people who have no children in school to pay school taxes? Should people who have four children in the public schools pay more than people with only two children? Should people who pay to send their children to private schools be required to pay the tax? How do the schools benefit society in general? How do they benefit business? (They provide workers who have learned certain skills and habits that are useful in business.) The same kinds of questions can be asked about many other public institutions. (Should the citizens of Nebraska pay as much to support the Coast Guard as citizens of Long Island? Are the people who drive over a toll bridge the only ones who derive benefit from that bridge?)

Examine your local taxes. What kinds of taxes exist in your locality? What are the tax revenues used for? Which ones affect young people most directly? List and evaluate each of these taxes. Are they direct or indirect? Are they progressive, regressive, or proportional? Are they based upon benefits derived or ability to pay? What changes, if any, would the students want to make in these taxes?

Hold class discussions on conflicting goals and taxation. Present the class with such situations as the following:

> "Many educators are urging that the government use some of its tax revenues to help poor students pay for a college education but many economists are saying that taxes must be cut to help bring the economy out of a recession. Which group do you support, and why?"
>
> "Some economists say that it would be good for our economy if more Americans bought cars from American automobile companies; but others are urging the government to put a higher tax on gasoline to help reduce the federal deficit and to encourage people to conserve fuel, even though such a tax would discourage people from buying cars."
>
> "A noted labor leader states that higher taxes are needed to reduce the federal debt, and that these taxes should be placed on business. A business leader agrees that the debt needs to be reduced, but says that higher taxes should be placed on consumer spending, while taxes on business are lowered to enable companies to invest in new capital equipment and technology that will improve production. Who is right?"

VI. Economic Growth is a National Policy Goal

To initiate the study of economic growth, start with the growth issues in your own area. Is the economy of your town, county, or region growing, declining, or stagnating? What are the controversies surrounding this issue in your area. (On Long Island, for example, there is heated debate in many towns over the subject of economic growth. Some want growth to create jobs and assure prosperity for local businesses; others oppose growth because it may result in more pollution, traffic jams, strains on the water supply, the destruction of natural resources, etc.) Ask the students to consider how they might be personally affected by growth in the area. Those seeking jobs or business opportunities in the region may favor growth, while those who want to preserve the existing quality of life may oppose it. Some lively

debates could result. The decision-making grid on page 3 might be used to analyze the problem and identify the trade-offs involved. Try to identify and list the groups in the area who would benefit from growth, and the groups that would be adversely affected. Which groups do the students belong to or identify with? (Some may belong to more than one group, and may find that there are conflicts between these groups. Example: As a conservationist, Jim wants to preserve Suffolk County's farmland; but he also hopes to get a job with a construction company that will prosper if farmland is sold for use as building lots.) [To study the economy of your region, use the book The Economy of New York State, published by South-Western Publ. Co. in 1987. This is a high school level book. A Teacher's Manual is available also.]

After completing the above activity, inform the class that economic growth is also a national issue, and that we are all affected by it. Be sure they understand that the economy is growing when the real per capita GNP is rising. (That is, the Gross National Product must be adjusted for inflation and divided by the population to give a true indication of the rate of growth.) Once they see that growth means we have more goods and services available per person, ask them to list the problems that might be mitigated or solved by economic growth. (They should include such things as poverty, lack of adequate housing for many people, crime, the need for adequate national defense, health care, improvements in education, and the need for better roads, bridges, tunnels, ports, and other parts of our infrastructure.) Are the students directly affected by any of these problems? Will economic growth mean more and better job opportunities for them? Will it mean that more and better goods will be available to them at lower prices? Of course, some of the possible drawbacks of rapid economic growth might be noted as well, such as pollution and the depletion of natural resources.

Because technology often plays a major role in growth, have the students examine technological developments that interest them and explain how those developments might contribute to economic growth. For example, how are computers helping our economy to grow? How might robots affect our productivity? What kinds of training and education will the students need to get good jobs in some of newer technological fields?

Read the following to your class to initiate a study of the problem of our crumbling infrastructure.

> "The recent record of bridge failures and deficiencies in highways, railroads, water systems, waste disposal programs and air-traffic control has highlighted the serious condition of our nation's infrastructure and points to the need for urgent corrective measures. To allow our trillion-dollar investment in public works to deteriorate is to reduce America's productive capacity in a competitive world, leading to a general decline in our economy and standard of living." (Letter by Elmer B. Isaak published in the "Ideas" Section of Newsday, 3/20/88, p. 2.)

Then, as a homework assignment, have the students list all the examples of infrastructure that they can find in your area. (Note: The term social capital or public capital is sometimes used to describe infrastructure.) The lists should include public buildings, sewer systems, water supply facilities, roads, railroads, dams, and the like. Have the students indicate which examples are owned by local government, which by state government, and which by the federal government. (Some might be privately owned and thus would not be called social or public capital, such as a privately owned electric power system.) Ask them to evaluate the condition of these

facilities, and to explain their economic importance. How do they affect the local economy? Are the students inconvenienced by facilities that are in disrepair, such as roads with pot-holes? What should be done about the problem? Who should pay for it, and how? To what extent is the local situation part of a national problem? (According to a group called "Rebuild America," it will take between $500 billion and $1 trillion of public and private investment to "retool" the United States.) A good source for a study of the problem is the high school unit Infrastructure; An American Crisis?, which includes a manual, film strip, and audio tape. AGC Education and Research Foundtion, 1957 E St., N.W., Washington, D.C. 20006.

Relate the subject of economic growth to student career planning. Have the students do library research or obtain material from the U.S. Bureau of Labor Statistics (201 Varick St., New York, N.Y.) to find out what industries are expected to grow. What kinds of job opportunities will these industries provide for students? How can students prepare for the future by training for these jobs or by going into businesses? If students are interested in investing some of their savings, which industries offer the best prospects for growth and for profit? How can we all help to promote economic growth by saving and investing? [Some publications that might be useful for this activity are: Occupational Outlook Quarterly, U.S. Bureau of Labor Statistics, Washington, D.C. 20212; Careers, published from time to time as part of the New York Times; Career Forum, published occasionally by Long Island's Newsday; and Career Success, Office of Occupational and Continuing Education of the N.Y. State Education Dept., Albany, N.Y. 12234. Many useful publications can be purchased from the Social Studies School Service, Box 802, Culver City, Calif. 90232-0802 -- see their catalog Guidance & Career Education.]

For a challenging assignment, ask students to consider a business that they would like to start. Have them try to answer such questions as these:

- What help, if any, would you be able to get from a government agency, such as the Small Business Administration or a local government office?
- How might your business contribute toward America's economic growth?
- Would this type of business be able to survive a recession or depression? (Is the demand for the product or service inelastic?)
- What government actions might harm your business? (Increase in business taxes, for example.) What actions might help you? (The Federal Reserve acts to keep interest rates low, so it costs you less to borrow money for investment purposes, for example.)
- In what ways would government (including state and local government) control or regulate some aspects of your business? (Do you need a license or charter? Are you affected by zoning regulations, health and safety laws, minimum wage legislation, etc.?)
- Is there adequate social capital where your business would be located? (Are there good streets, sidewalks, parking lots, public transportation facilities, water and electric supplies, police and fire protection, and the like?)
- Are there problems in your area that might harm your business, such as an unpleasant or polluted environment, a high crime rate, traffic jams, high unemployment, shortage of skilled workers, excessive taxes or government regulations, etc.? What should be done about these problems?

UNIT 4: THE UNITED STATES AND THE WORLD ECONOMY

I. Reasons for International Trade

Trade occurs because both sides benefit. To initiate a discussion of this, say: "Assume that the New York Mets baseball team has three excellent catchers but lacks a competent shortstop; while the Chicago Cubs team has three very good shortstops but needs a catcher. What is apt to happen?" Students should know that a trade will probably take place. Ask them to explain the reasons for the trade and the probable results -- both teams became stronger as a result. Ask students to give examples of trades that they have made. Summarize by pointing out that the sampe principles (mutual benefit) explain trade between nations.

Ask students to make a list of the imported items found in their own homes. Be sure that they go beyond the obvious things, such as tea, coffee and bananas. They should include VCRs, compact disc players, and things that have foreign-made components. Have the students read their lists in class, then ask: "What would our lives be like if we suddenly lost all the things we get from other countries?"

Have students interview parents, friends, and relatives to learn if any of these people have a direct involvement in international trade. In reporting their findings to the class, it should become clear that many people have jobs or businesses that depend upon foreign trade. Some of the students might be asked to interview executives of major industries in your area to learn how they are affected by foreign trade.

After explaining absolute and comparative advantage, ask the students to describe any situations in which they have used these principles. "Have you ever paid someone to do something that you could have done better?" "Perhaps someone in your family is an excellent cook, but often buys food items from a super-market or bakery. Why does he or she buy the food items, even though he or she could do a better job of preparing them?" The ensuing discussion should make it clear that we are better off if we concentrate on those tasks in which we have the greatest relative advantage, and that nations trade for the same reason.

Nearly all students want automobiles or other goods that are produced by foreign countries as well as by the United States. Ask students to name some of these items that they hope to buy, such as cars, and to give the approximate prices of the items. Explain how a tariff raises the price that the consumer must pay, and ask the students how much more they would be willing to pay for the car (or other imported item) to protect the U.S. producer from foreign competition. Do the same for quotas, which limit the amount that can be imported (thus reducing the supply and raising the price).

Organize a mock Congressional hearing on U.S. trade policy. Assign some students to act as workers who have lost their jobs because of foreign competition. Others can act as business people or workers who depend upon foreign trade. Some can speak for consumers who want to buy the

imported goods, or who favor foreign competition because it may help to keep domestic prices down and/or force American producers to probetter quality products. Students acting as members of the Congressional committee should be prepared to ask tough questions of those who are presenting various points of view, and should be well informed about our existing trade policies and the economic principles pertaining to trade. After the "hearing" ends, ask the class to discuss the various points of view and policy proposals, and to try to reach a consensus on what they think our government's policy should be.

After students have learned about foreign exchange and how trade takes place among nations with different currencies, ask each student to plan a trip in which he or she will visit at least three other countries. Urge them to select countries that they actually hope to visit some day. They should find out what type of currency each country uses and what each currency is worth in terms of U.S. dollars. (Major newspapers, such as the New York Times, often print foreign exchange rates daily.) The student must list each currency and give its value in U.S. dollars and cents in one column, and the value of the U.S. dollar in terms of the other currencies in another column. Ask them to tell how much they want to spend in each foreign country, such as $500, and indicate how much it would be in the currency of the foreign nation. (For example, if the French franc is currently valued at 5.75 to the U.S. dollar, then the student would need to obtain 2,875 francs -- 500 x 5.75.)

To make the above exercise more challenging, point out that exchange rates are not stable. Arbitrarily revise the actual exchange rates and have the students revise their lists accordingly. For example, if Mary has chosen Germany, France, and Switzerland as her countries to visit, tell her that the value of the U.S. dollar has declined by 10% in relation to the German mark, increased 10% in relation to the French franc, and dropped 5% in relation to the Swiss franc. How might these changes affect her spending in each of the three nations? How might they affect a U.S. company or farmer trying to sell goods to these countries? How might they affect an importer trying to buy goods from these countries?

Ask each student to consider how he or she might be affected by a change in the value of the U.S. dollar, or how parents might be affected. For example, a family planning to visit Europe would be hurt if the dollar began to decline, because foreign goods and services would cost more. A farm family would benefit, however, because foreigners could now buy more American crops. If the dollar rises in value, these situations will be reversed. Ask the students to recall the lists of imported items that they prepared earlier. If the U.S. dollar declines by 10% in relation to foreign currencies, what will be the effect on their purchases of these listed items? Suppose the U.S. dollar rises by 10% in relation to the foreign currencies, how might this affect their purchases of those goods? (A decline in the value of the dollar would mean the student could buy fewer foreign goods, or would have to pay more for them. A rise in the dollar's value would enable them to buy more foreign goods.)

(For several other ideas for teaching this subject, see Sanford Gordon's Economics U$A: A Resource Guide for Teachers, New York: Joint Council on Economic Education, 1988, pp. 247-250; 256-257.)

II. Characteristics of Alternative Economic Systems

Return to Unit 1, Part II (Economic Systems), pages 6-8, for activities that could also be used in this part of the course. Economic systems are categorized as command, traditional, or market in that earlier section. Here we deal in greater detail with non-market economies, and use the categories communism and socialism. Communism is usually considered to be a command-type economy, while socialism is regarded as a mixed economy because a certain amount of private ownership and market-type decision making co-exists with government ownership and control. It is hard to give a precise definition of socialism because there are so many variations of it, both in theory and in practice.

One way to define communism is to say that it is a system or a situation in which goods and services are collectively produced, collectively distributed, and collectively consumed. Note that this is a non-political definition of the term and has nothing to do with the Communist Party. Thus, it should be possible to have the students identify situations in our own country that meet the definition. Examples: A public park is owned by the town, supported by funds from general taxation, and is open without charge to all citizens. Public libraries, public schools, and fire departments are other examples. This does not mean that we are "a communist country", however, because most goods and services are still privately produced, privately distributed, and privtely consumed. Ask students to discuss these "communal" or public facilities and debate the question: "Would it be better to have these facilities privately owned?"

Some consider socialism to be a system or situation in which some goods and services are collectively (publicly) produced, but privately consumed. Example: A town owns a local electric power company and sells electricity to consumers who may use the electricity as they see fit. Students can be asked to identify other examples, such as a beach owned by the town or county but not freely available to all because people must pay a fee to use it. Again, students might debate the question of whether or not these services should be privately owned.

Economic planning is common in nations with communist or socialist economic systems, but is rare in market economies. Have the students study some of the countries that have practiced economic planning (such as the five-year plans of the USSR) and compare them with the United States. How would their own lives be different if the U.S. practiced economic planning? What effect would it have on their economic freedom? Organize a debate on whether or not the U.S. should engage in comprehensive economic planning. Study your local governments to learn what sort of economic planning, if any, they practice. Who makes the plans, and how? How effective are they? Do consumers and citizens who are not public officials have a voice in the planning? How might teen-agers make their views known to the planners?

After having studied alternative economic systems have the students write papers on which type of system they would prefer to live in, and why.

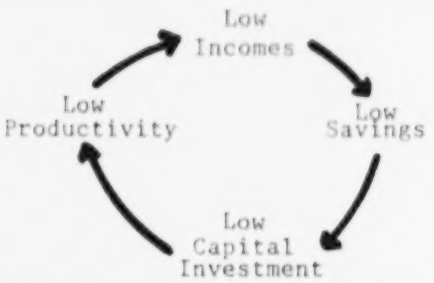
III. Economic Problems of Developing Nations

To initiate a discussion of the plight of the poor nations you might play a recording of the song "We Are the World" or the rock song "Bangladesh" (George Harrison). Ask such questions as: "Why are rock musicians so concerned about problems of poor nations that they have written songs about them and helped to raise money to help them?"*

Invite former Peace Corps volunteers or other people who have visited developing nations to speak to the class on the economic problems that these nations face. Ask the students to write creative papers on "What my life would be like if I were a student in one of these nations."

One problem faced by many developing nations is a huge external debt -- vast amounts of money owed to other nations. To learn how this problem might affect the United States, have the students read the novel Default! by John Charles Pool and Ross M. LaRoe (N.Y.: St. Martin's Press, 1988). This brief work of fiction (139 pages) is an exciting murder mystery and adventure novel, but it explains how Mexico's debt could have a devastating effect on the American economy, and suggests that the strong developed nations (the United States in particular) must help the poorer nations cope with the debt problem.

Have students do some research to compare the problems of the United States during its early years as a new nation with the problems of the new developing nations of today. How were the problems similar? How do they differ? Why was it easier for the U.S. to solve its problems? One simple model that can help to explain the plight of many developing nations is the vicious circle, illustrated below:



Explain that very low incomes (such as the per capita income of only a little over $100 a year in Bangladesh) leads to low savings; that low savings leads to low capital investment (someone has to save if capital investment is to occur); that low capital investment means too little modern machinery, equipment, tools, and education, and that this results in low productivity (low output per hour of labor); and that this finally leads to low incomes. Discuss the problem: "How can the poor nations break out of this vicious circle?" "Is it the responsibility of the richer ntions to help them?" "Would we be helping ourselves if we helped the developing nations?" "What form should our assistance (if any) take?" "What problems might the richer nations eventually have if they do not help the poorer nations?"

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* See the Appendix for a list of rock songs that might be used to initiate discussions of economic issues.

IV. The Economics of Population Growth, Resource Scarcity or Imbalance and Economic Growth

Return to Unit 3, Part VI, (Economic Growth is a National Policy Goal) pages 36-37, for some ideas on teaching about economic growth. The final section of the New York State economics syllabus calls for a further study of growth on the international or world level. Nevertheless, the subjects in this final section can first be approached on the local level to enable students to see their relationship to their own lives and their immediate environments.

Population growth is a serious problem in some areas of the world because those areas lack the resources to feed additional people. You might first approach this subject with a study of population in your own town or region. Is the population growing, declining, or remaining stable? If it is changing, are those changes positive or negative in their effects? In some cases a change can be positive in some respects and negative in others. A growing population could benefit an area by providing additional members of the laborforce and additional customers for local businesses. It could be harmful, however, if it puts pressure on scarce housing, results in overcrowding, and strains the existing resources required to serve the population. What is the nature of the growing population? Are the newcomers wealthy people who will add to the town's tax base, or impoverished persons who will need welfare? What will these changes imply for the teen-ager who is about to leave school and enter the local labor force? After you have examined the population situation in your area, move to the national and international levels. How might population problems in other parts of the world affect the United States?

It is said that economic growth is often accompanied by more pollution. Is this the case in your own area? Are your beaches and water supplies becoming contaminated because of industrial waste, additional sewage, and the like? Is this happening to the world as a whole? You might use the famous case of the Long Island garbage barge that was unable to find a place to dump the garbage to illustrate one aspect of the problem. In this case, a local problem became an international problem! Ask students to suggest ways of dealing with such problems. Who should be responsible? Who should pay the costs? What can we as individuals do to help? (Example: Separate your trash and garbage so that some of it, such as paper and metal items, can be re-cycled.)

Because economic growth usually means that we use more of the world's natural resources, a study of conservation would be fruitful. What are the natural resources in your own area? How would faster economic growth in your region affect these resources? How would each student's way of life be affected by the loss of the region's natural resources? Have the students interview their grandparents or other elderly people to learn what natural resources existed in the past as compared with the present. As a class project, try to develop a suggested plan whereby we could have economic growth and still preserve our natural resources. Would your plan for your region be applicable on the national and international levels as well?

APPENDIX

Economics in Rock Music

Music can sometimes be used to initiate discussions of economic topics or to illustrate principles and problems. The LP record "Hard Time Hungrys" contains 12 songs dealing with the recession of the early 1970's (RCA APL1-0906, produced by Bobby Bare and Bill Rice); "Songs from the Depression" has 18 songs about conditions in the 1930s (Folkways Record FH 52 64 by The New Lost City Ramblers). Today's teen-agers would probably be more interested in rock songs, however. Some that deal with economic topics (or at least use economic terms) are as follows:

"Money" (Pink Floyd) -- Can be used to start a discussion of what money is, what roles it performs, what problems relate to it.

"When the Money Runs Out (Leo Sayre) -- Can be used to discuss the distribution of money and income.

"Union Man" (Neil Young) -- The role of unions in our economy.

"The Boxer" (Simon & Garfunkel) -- Can lead to a discussion of the plight of the person who has few marketable skills in our complex economy.

"Charge It" (Tim Curry) -- Consumer credit; unwise use of credit and credit cards; effects of credit on our economy.

"All Through the 80s" (Manfred Mann) -- Current economic conditions.

"Tax Man" (The Beetles) -- What is a fair tax? Theories of taxation can be discussed.

"I'd Rather Be Rich" (Chicago) -- Use to discuss distribution of income.

"Taking Care of Business" (Bachman Turner Overdrive) -- Use this to discuss the nature of business and its role in our economy.

"Bangladesh" (George Harrison) -- Illustrates problems of poor nations.

"Good Night, Saigon"(Billy Joel) -- Can lead to a discussion of the costs of war, and the economic impact of war.

"Blue Collar Man" (Styx) -- The relative decline in the demand for blue-collar workers in the U.S.

"Allentown" (Billy Joel) -- The decline of the steel industry and other "smokestack industries" in the U.S.

"My Hometown" (Bruce Springsteen) -- The closing of textile mills and the loss of jobs.

Note: Some of these songs are very explicit in setting forth the economic concepts, issues, or problems. Others only hint at the economic principles, and the teacher will have to bring out these concepts through discussion, questions, or outright explanations.

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